



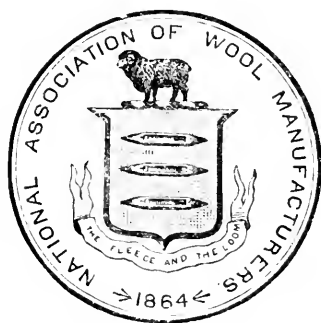
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BULLETIN
OF THE
National Association
OF
WOOL MANUFACTURERS,
1913.

FOUNDED NOV. 30, 1864.

EDITED BY WINTHROP L. MARVIN, *Secretary*.



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BULLETIN

OF THE

National Association of Wool Manufacturers

A QUARTERLY MAGAZINE

DEVOTED TO THE INTERESTS OF THE NATIONAL WOOL INDUSTRY.

VOL. XLIII.]

BOSTON, MARCH, 1913.

[No. I.]

MEMORIAL OF THE ASSOCIATION.

A STATEMENT ON BEHALF OF THE AMERICAN WOOLEN MANUFACTURE AS PRESENTED BY PRESIDENT WOOD IN WASHINGTON.

As a first step toward the revision and reduction of the Aldrich-Payne tariff, to which the Democratic party stands pledged, a series of hearings on the various schedules of the tariff was held in the month of January, 1913, before the Committee on Ways and Means of the House of Representatives in Washington. The hearings on the wool and woollen duties occurred on January 27 and 28. There was a notable attendance of manufacturers, merchants and others interested in the woollen industry. The memorial of the National Association of Wool Manufacturers was presented on the 27th by President John P. Wood, who submitted the statement to the committee without reading it, explaining that after it had been examined by the committee he would be glad to give any further desired information. The memorial in full is as follows :

MEMORIAL OF THE NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.

To the Committee on Ways and Means, House of Representatives, Washington, D.C. :

Accepting in good faith and with full confidence in its sincerity the assurance of the new administration that no

legitimate business will be injured by the contemplated revision of the tariff, the National Association of Wool Manufacturers appears before your committee to urge a counsel of caution by indicating the conditions under which the woolen industry has been developed in the United States, and the impossibility of its continuance unless the rates of duty and the method of their application are such as will, under all the varying conditions of trade and fluctuations of values, permit the domestic manufacturers successfully to meet the competition of their foreign business rivals.

It is to be noted, in passing, that the woolen industry is essentially, and in a very unusual degree, a legitimate business. Its product is among the prime necessities of life, — food alone outranking it in natural importance, — and this reason, if no other, should induce conservation of an existing instrumentality that can supply, without dependence upon foreign sources, all the woolen clothing required by the country either in its civil life or under the exigencies of military defence. But in another sense the woolen industry claims its place among the legitimate businesses of the people, for it was brought into existence in consequence of various Federal laws enacted for the express purpose of developing that business in this country. Its existence has been possible only because of such laws, and the operations and conduct of the business have been in strict conformity with law, the domestic woolen trade having been in an unusual degree free from complaint of law-breaking.

Moreover, thousands of persons who were in no way responsible for the enactment of these laws have since given years of their lives to acquire the necessary training and experience to make a vocation of this business, while vast amounts of capital, including great sums from abroad, have been invested in the business, and those who have thus invested their time in obtaining technical training, as well as those who have invested capital, have done so upon the faith of laws duly enacted by the Congress of the United States. For all these reasons the woolen trade must be regarded as essentially a legitimate business, and therefore entitled in the

fullest degree to avail itself of the assurance that no harm will be done to such in the revising of the tariff.

HOW THE INDUSTRY DEVELOPED.

When the protective tariff was first instituted in the United States, the purpose was not to offset an *existing* difference between wages here and in Europe, for at that time wages on this side were not materially higher than those prevailing in Great Britain, then the chief source of supply of manufactures. The primary purpose of the protective tariff at that time was to induce capital and enterprise to establish domestic manufactures by providing the opportunity for attractive returns. The far-seeing statesmen who advocated this policy well knew that, as soon as the obstacles which must first be overcome by the pioneers of new industry were successfully surmounted, competing establishments would promptly arise and thereby the advantages would accrue to the whole people. And their wise purpose has been fully realized, for the industries made possible by the tariff, competing for labor not only among themselves, but with other kinds of employment, have progressively raised the rates of wages until they have attained the present great excess over those paid for like employments in other countries.

Simultaneously with the competition for labor there was created, by the increasing productive capacity, a competition in the sale of products that has steadily reduced the margins of profit until now, in the case of the woolen industry, the normal manufacturing profit is probably less than that of any of the other domestic industries, and is certainly as little as in the woolen industry of Great Britain or the other manufacturing countries of Europe. The foreign capital that has come here for investment in the woolen manufacture has come not because of any higher profits to be made here, but because the American protective tariff, as the industry has developed, has made it more and more difficult for European mills to sell goods in this market. One of the principal representatives of foreign capital who has come here states distinctly that the profits of American woolen and worsted

mills "are not higher, but rather lower than those of similar European enterprises."¹ The ultimate result of the protective policy, so far as it relates to woollen manufacture, has been that the country possesses an industrial equipment capable of fully supplying its people with all its requirements in woollen products of every kind and quality, in peace or war, and the realizable benefits of the tariff are now, as they have been for many years, absorbed in the higher wages and higher costs of supplies.

Stated in simplest terms, toward a reduction in the price of woollen commodities the manufacturers can yield nothing but the factor of profit, which averages a rate much below that of almost any other branch of business in this country, is certainly no more than that earned in the same industry abroad, and does not average for the efficient and capably managed establishments more than from five to seven per cent on the value of sales,² with which a comparison is invited of the profits of general mercantile and commercial business. It is not expected that this statement will be accepted without verification. We invite and urge Congress to make the most thoroughgoing investigation to ascertain whether these assertions are or are not well founded, and we pledge our earnest and sincere coöperation to that end.

Verifying data can quickly be had by a tabulation of the returns made by woollen manufacturing corporations for the assessment of the Federal corporation tax, as also from the reports of all mills to the census bureau. Or, if Congress is willing to appoint a commission to ascertain the facts independently of the figures already gathered by various bureaus and boards of the Executive Departments, every facility will be afforded to the representatives of Congress to obtain the information at first hand.

¹ Julius Forstmann, president the Forstmann & Hufmann Company, "The Wool Manufacture in America and Europe," p. 26.

² Official investigation has already ascertained that the manufacturer's profit on the cloth in certain typical kinds of clothing averages but 1.9 per cent of the selling price of such garments (see Tariff Board Report, Vol. III., pp. 883-891), and those familiar with the business know that in respect to a large part of the clothing of the people the rate is distinctly less than this rate.

Meanwhile we assert with the confidence of intimate knowledge that the elimination of the entire margin of manufacturing profit will have no appreciable effect upon the prices paid for woollen clothing by the consumers, and, even if it is conceivable that the mills would continue to operate indefinitely without profit, any material change in prices of woollen clothing effected by tariff reductions can be secured only through corresponding reductions in the wages, not only of woollen operatives, but also of all those who are engaged in the production of the supplies required by the woollen mills and by the operatives employed therein.

The wool manufacture is not one of the industries that have developed a considerable export trade. Our total exports of manufactures of wool for the fiscal year 1912 were valued at \$2,534,901, or about one-half of one per cent of the total output of the American industry. On the other hand, the imports of wool manufactures from abroad in the same fiscal year 1912 amounted to a value of \$15,182,694, representing a duty-paid value of \$27,781,940. The American manufacturer supplies most of the American market, but, so far as the cloth manufacturer is concerned, he has practically no market abroad, the chief items of our exports being ready-made clothing shipped to the near-by markets of Canada and Mexico. Wool manufactures in general cannot be largely exported because of the higher cost of labor, machinery, mill construction, and supplies in the United States. Of all this, labor is the chief determining factor.

WAGES IN WOOLEN MILLS.

The earnings of employees in the domestic woollen trade, when compared with the wages of those engaged in identical work in other countries, afford abundant evidence that the first and immediate benefit of the protective tariff is realized by the wage-earners. Prior to the investigation of this subject by the Tariff Board, a committee was appointed to obtain for this Association dependable data concerning wages in the woollen trades of England and the Continent, for com-

parison with wages paid in this country in corresponding employments. The committee was made up of men who, by reason of their personal experience in wool manufacturing in other countries, possessed the knowledge of trade conditions abroad and had the connections necessary to obtain the desired data and test their accuracy. The results of the investigations of this committee are presented as Appendix II. to this memorial.

To avoid even the appearance of exaggeration in the compilation of these wages, much care has been exercised to omit comparison of extreme differences, so that the figures submitted are rather those of averages. But average comparisons do not justly gauge the full benefit to the worker in the domestic mill. The government may provide opportunity, but it remains for the individual worker to avail himself of the possibility which the law has given. A fair comparison of the wages in different countries is not one of average rates, but should be one of actual earnings of the most efficient. Only the earnings of the competent and industrious workers are a fair index to the wages of labor in the respective countries. One or two examples will illustrate this, and will at the same time indicate how free from exaggeration the comparisons of wages submitted in the appendix are. The latter gives the following as average wages for weavers:

America.....	\$13.00 per week.
England.....	9.00 " "
Continent	6.50 " "

But, for a more accurate comparison of the advantages enjoyed by American labor, we would take, for instance, the actual earnings of, say, ten men weavers and ten women weavers in similar mills here and abroad. To illustrate: On page 760 of the Tariff Board Report a statement is given of the actual earnings of each weaver in a German mill. From this statement we take the figures for the ten men and ten women who had the largest earnings, and set them down in comparison with the actual earnings of ten men weavers and

ten women weavers having the highest earnings in a similar American mill:

	German Mill.		United States Mill.	
	Hour.	For 55 hours.	Hour.	For 55 hours.
10 men, highest average each. . . .	12.89 cts.	\$7.09	31.25 cts.	\$17.19
10 women, highest average each. . .	8.68 cts.	4.77	27.50 cts.	15.13

On page 758 of the Tariff Board Report the earnings of weavers in another German mill are given, and of these the report says, "A more significant pay-roll could not have been selected in Germany." This statement does not distinguish between men and women, but a comparison of the ten highest earnings with the ten highest, irrespective of sex, in a similar American mill follows:

	German Mill.	United States Mill.
	For 55 hours.	For 55 hours.
10 weavers having highest earnings, average for each.	\$7.12	\$17.34

These, it is to be noted, are the highest earnings. The Tariff Board Report cites the earnings of German women weavers for full time as low as \$2.05 per week, and on page 761 the report says:

"So far, then, as concerns the actual earnings of German weavers aside from the rate per yard, it is very clear that the average for men is between 9 and 11 cents per hour of actual time worked. While it is not uncommon for a weaver to earn \$1.25 or \$1.30, and while earnings of \$1.50 or even \$1.75 are not unknown in rare individual cases, yet 95 cents to \$1.10 is the usual earnings per day for German male weavers and 70 cents to 80 cents for women."

Against the rare individual cases of \$1.50 to \$1.75 in Germany, as mentioned in the quotation just cited, we can submit innumerable instances of woolen weavers in the United States whose average earnings exceed \$3.50 per day.

For France the Tariff Board gives the earnings of weavers in the making of sixteen different fabrics, from which it appears that the highest rate was under 93 cents; the lowest, 62.73 cents; and the average, 81.77 cents per day (Tariff Board Report, p. 761).

For England the Tariff Board gives the earnings of weavers as :

Men on worsteds.....	\$4.98 to \$6.56 per week,
Women on worsteds	2.55 “ 3.89 “
Men on woolens	5.47 “ 6.68 “
Women on woolens	3.16 “ 4.86 “

with the significant note that very few *men* weavers are employed (Tariff Board Report, pp. 814, 817, 826).

And another investigator for the Federal government, Mr. W. A. G. Clark, of the Department of Commerce and Labor, reported¹ average earnings of weavers in the Bradford district of England as :

Men	\$4.86 to \$6.00 per week.
Women	3.60 per week.

And he quotes the figures given by an English investigator as :

Yorkshire (average).....	\$3.16 to \$4.13 per week,
Yorkshire (best)	7.29 per week,

and this latter (English) authority further states that American weavers, as a whole, average three times as much as Yorkshire weavers.²

Earnings of weavers have been quoted because they are always regarded as typical. Like differences exist for other occupations. For example, the following figures of the British Board of Trade were recently quoted in the Manchester (England) *Courier* for the English woolen and worsted trade :

Men, full time, per week, average.....	26s. 6d. = \$6.36 per week.
Lads, “ “ “ “ “	8s. 10d. = 2.12 “ “
Women, “ “ “ “ “	13s. 10d. = 3.32 “ “
Girls, “ “ “ “ “	8s. 4d. = 2.00 “ “
Average, all classes, per week	15s. 9d. = 3.78 “ “

¹ Manufacture of Woolen, Worsted and Shoddy in France and England (W. A. G. Clark), p. 50.

² Manufacture of Woolen, Worsted and Shoddy in France and England (W. A. G. Clark), p. 48.

These we understand to be official figures of a department of the British government.

Other occupations than weaving show similar differences. As, for loom-fixers, the Tariff Board reports foreign rates ranging from \$4.52 per week (p. 830) to \$9.73 (p. 819); and Mr. Clark in his report states the standard rate for Bradford as \$8.40 for 24 broad looms, while in the United States rates of from \$20 to \$24 for 20 looms commonly prevail.

For warping, the Tariff Board reports German earnings per week of 60 hours as

For men, \$3.64 to \$6.43	} pp. 830, 834,
For women, 2.14 to 4.32	

and English rates for 56 hours as

For men, \$6.53 to \$8.26,
For women, 3.65 to 4.38,

while the average for all warp dressers, as taken from a recent American pay-roll, was \$22.10 for 55 hours.

For drawing-in, the Tariff Board reports earnings in Germany as \$3.57 to \$4.28 per week of 60 hours, against which we quote from recent American pay-rolls actual earnings of \$12 to \$15 for 55 hours (Tariff Board Report, pp. 830-834).

The purpose of making these comparisons here, it will be remembered, is merely to indicate the care which was used in preparing the comparative figures submitted in the appendix herewith, which figures were compiled before the data contained in the Tariff Board Report were available. The publication of the latter report not only justifies the differences given in the Association statement, but shows them to be most conservatively stated.

If your committee desires further evidence upon this subject, we are prepared to submit it in unlimited quantity for every kind of employment in the woolen manufacture. But that which is given in the accompanying exhibits will probably be regarded as sufficient, for no one who has seriously studied the subject questions the fact that wages in the woolen industry in the United States are, for the various

kinds of work, from two to four times as high as for the same employment in other countries.

WAGES AND THE COST OF LIVING.

In an effort to dispose of the incontrovertible fact that the American wages are so much higher, opponents of the protective policy have alleged three things, viz.:

1st. That wages in the woolen mills are lower than those in certain other employments.

2d. That the efficiency of the operatives here is so much greater as to offset the difference in wages.

3d. That the cost of living is so much greater in the United States as to offset the higher earnings.

With respect to the first allegation, it is sufficient to say that comparisons can properly be made only between like employments in different countries. The same reasons which, for example, make the average wages of textile employees less than the wages of those engaged in the building trades in England are equally operative here. They are too palpably evident to require explanation. Such comparisons are as inapt and meaningless as a comparison between the salary of a member of Congress and that of a high school teacher.

In respect to efficiency, it is only necessary to say that the operations of woolen manufacture are nearly all performed by machinery; that the machinery in use in the mills of the United States is practically identical with that used in Europe; and that the limits of productive efficiency are largely those imposed by the requirements of the manufacturing process rather than such as are due to the personality of the operative. But, in respect even to the equation of personal efficiency, the report of the Tariff Board has confirmed what was already well known to all manufacturers who have had practical experience both in Europe and the United States, viz., that the advantage is entirely with the older countries, and that from the fact that many of the employees there have inherited technical experience through the persistent continuity of the same occupation in successive

generations of the same family. Not only do the efficiency studies of the Tariff Board experts show conclusively that the American mills have no advantage in the personal efficiency of workers, but the rates of earnings of employees who are paid by the piece afford corroborative evidence upon this point; and there is further confirmation in the particulars for conversion cost which are given for identical products.

Only in respect to the last of these contentions is there a semblance of actuality. It is probably true that the cost of living is somewhat more in the United States, and, to whatever extent this is so, some offset is properly to be made against the advantage of higher wages. It is therefore pertinent to ascertain how much more has to be paid here *for the same kind of living* than in other countries. And upon this subject there is a wealth of authoritative evidence proving that the advantage in wages far exceeds any countervailing disadvantage in living expense. From this abundant testimony we quote a few typical examples, chosen as illustrations because the sources from which they emanate cannot by any possibility be regarded as partial to the interests of woolen manufacture in this country.

First we have the official figures from a department of the British government, which states that, while wages in the United States are 2.4 times those in the same occupations in England, the cost of living here is but 1.52 times what it is in England. The figures for the cost of living are of course generally applicable, but the wages compared did not include the woolen trade, in which, from other data adduced, the comparison would be more nearly as 3 to 1.

Next we have the testimony of Mr. Samuel Gompers, president of the American Federation of Labor, who made a personal study of the subject, with facilities for observation that few others could have in equal degree. From his letters we quote the following significant expressions:

"In no city in Europe did I find rents any cheaper, wages considered, than they run in Philadelphia, Baltimore, Louisville, or in the New England towns not having a boom, or

even in many cities of the Mississippi Basin. What strikes the American is how little the European renting wage-worker gets for his money."

"Mentally contemplating the many cities I visited, and having in mind the conversations I had with workmen who had lived both in Europe and America, I believe I may assert that whether the cost of living in Europe or America is greater to the workingman depends entirely on the standard of living he adopts while in America."

"Living is cheap to the wage-worker in Europe only because he does without what in America soon becomes a necessity to him.—food in good quantity and quality, presentable clothes among his aspiring fellow-workmen and their families, and a comfortably furnished home in quarters responding to his awakened desires for equality with his American neighbors, and in general a larger and freer life."

"In the United Kingdom the poor dress in much the same clothing in summer and winter, the large proportion of the people in shabby clothes on the streets of Dublin, Manchester, or London, giving an impression to the American observer of prevalent poverty."

And then we invite attention to the statements of Mr. William R. Hearst, in a recent article sent by him while abroad to the *New York American*:

"The false statement that living in England is cheaper than in America has been made so often that it is believed by those who have not taken the trouble to learn the facts. Living is not cheaper in England than in America. If anything, it is dearer. Food is much dearer in England than in America. Luxuries, like fruit and many vegetables, are entirely beyond the reach of the average individual."

In dismissing this subject of the comparative cost of living, we ask thoughtful consideration of the statement upon this subject which is contained in the report of the United States Revenue Commission of 1866, to wit:

"Abundant national or individual supplies are not to be realized by the fact of cheapness. The ability to purchase depends not on the cheapness of the commodity, but on the means of payment. It is well known that the countries in which commodities are cheapest are not those where the

inhabitants are most amply supplied, and it is equally notorious that the people of this country, where commodities are at higher prices than prevail elsewhere, are more fully supplied, and in more full enjoyment of the comforts and luxuries of civilized life, than any population in the world."

Nearly half a century has elapsed since that observation was written, but in the lapse of time the fact has but become more impressively true, as every one knows who can from personal knowledge contrast the living conditions and comforts of the wage-earners then and now.

THE FORCE OF DOMESTIC COMPETITION.

The earnings of workers in the woolen trade being evidently so much higher here than in foreign countries, and the advantage of the higher wages when measured by purchasing power being clearly established, a revision of the tariff rates by which these earnings have been made possible cannot but place upon those who undertake such a revision a momentous responsibility. It has already been stated that as an industry the woolen manufacture enjoys no excess of profit out of which the effect of tariff reductions can be taken without influencing the prevailing rates of wages.

At the present time, under existing tariff laws, the greatest industrial activity prevails that this country has ever known. Wages are much the highest ever paid, not only absolutely, but relatively to the measure of the necessities and comforts of life which they will produce. The demand for labor exceeds the supply and creates a competition for help that insures the highest wages which the selling prices will produce. In view therefore of the limiting influence of the tariff rates on selling prices, it must be evident that any reduction of tariff rates on a given commodity, below that part of the existing rate which is actually availed of in the domestic price, must of necessity at once either correspondingly reduce the rates of wages or narrow the existing opportunities for employment.

It is doubtless true that the existing rates on some articles exceed the requirements of protection: but the Tariff Board

after thorough investigation ascertained that, in respect to these products upon which the duty might seem excessive, no advantage of this excess is realized by the domestic manufacturer, which confirms what has been repeatedly alleged, namely, that, with a productive capacity of woollen manufactures in excess of the entire requirements of the country, domestic competition regulates the prices of all products within approximately the same narrow limits of profit. If any one class of woollen goods by reason of excess of protection offered a larger profit, so much machinery would at once be concentrated upon the production of that commodity as to cause a great excess of supply and a lowering of price down to, or more probably even below, the common parity of profit. Only in the case of an industry which has failed to attain a development equal to domestic requirements does this tendency to equalization of profit, through internal competition, fail to operate.

The question then naturally arises, If on some commodities the duty is more than necessary and not availed of in domestic prices, why not reduce these rates to the limits required for protection? To this there could be no possible objection if that could be done without at the same time reducing the duties on other commodities far below the line which would permit their manufacture in this country. The reason for this is that there is such a vast variety of woollen goods, and the differentiation is so infinite, that it is impracticable so to classify and define them that each shall be subject to a rate of duty just sufficient and no more than sufficient. The objection and the difficulty of overcoming it have been frankly admitted and explained whenever a revision of the tariff has been under consideration by Congress.

The woollen industry has been sincerely desirous of eliminating all such instances, for, while such inequalities exist merely in theory and not at all in actual operative effect, their elimination would obviate much of the criticism of the woollen schedule upon the part of those who discuss it academically without the slightest knowledge of its practical

working. But the difficulty of overcoming these theoretical objections has thus far been found insurmountable. Meanwhile the laws of trade, more inexorable than those established by statute, effectively prevent the realization of any excessive profit. To illustrate: Of two fabrics subject to the same specific duty, one made wholly of a superior material permits a net profit to the cloth manufacturer of five cents a yard: the other, using a cheaper raw material, would theoretically allow a margin of, let us say, fifteen cents a yard; but, if on the latter fifteen cents could be realized, none of the better goods would be made here. All the mills would, as has already been stated, engage in the manufacture of the cheaper cloth, requiring less capital, less skill, less risk, and at the same time affording much greater profit.

But the facts prove the contrary. All grades of goods are freely made according to the market demand for the respective kinds and qualities, and there must necessarily be an approximate parity of profit on the different sorts, or a disproportionate share of the productive capacity would be attracted to the sorts yielding the larger profit. But the lesser expense for capital, the reduced risk, and the lower degree of skill required in the making of the cheaper varieties, all operate to make competition on these more intensive and profit margins therefore less.

If the duty should be adjusted to the requirements of the cheapest products, then, as was so clearly stated by an able exponent of this subject in the Congressional debates of nearly a generation ago:

“We should determine by our legislation that the manufactures of this country shall be confined to the lower grades of goods. That would be to affix the permanent brand of inferiority upon our woolen manufactures.”

It is a matter of common knowledge not only to those identified with the trade, but also to all others who have given any study to the subject, that no greater opportunities for profit exist in the making of goods upon which there is a seeming excess of protection. If there were, no one would

now be engaged in the manufacture of the finer qualities, the production of which has so greatly increased during the past fifteen years, because, under favorable tariff rates, improvement of technical skill has been developed, and the increasingly intense competition in the field of cheaper products has attracted a larger interest in the finer kinds.

It is often alleged that the application of the tariff exclusively in ad valorem form would result in obviating all inequalities and assure equal and exact results. But this is notoriously untrue, for the labor or conversion cost of many of the cheaper fabrics is as great as for similar goods of higher value, the difference in cost being due solely to the difference in the value of the raw material. An example of this kind is shown in Appendix IV. by two cloths of similar structure and weight, one being composed wholly of wool and the other having a cotton warp and wool weft. The clothmaker's cost for making these two fabrics is identical, but the finished values differ very much because of the widely different cost of the raw materials.

The amount of protective duty required for both cloths is the same. An ad valorem rate sufficient to produce that amount of duty, when computed on the cheaper goods, would, when applied to the value of the more expensive cloth, produce an amount in excess of the required protection. On the other hand, if the rate be such as when applied to the higher cost cloth will produce the required amount of duty, that rate, when applied to the lower-priced goods, would yield less than the required amount. Both these cloths are meritorious products, each intrinsically worth its cost. The cheaper one, made partly of cotton, is as durable and as thoroughly excellent at its price as the one of higher cost. If the manufacture of both is to be continued in this country, the ad valorem rate must be high enough to protect the cheaper cloth; and, to offset the apparent inequality, dependence must be placed upon the abundant domestic competition, just as has been the case under existing forms of duties which have been in effect for 18 of the last 22 years on low-cost cloths.

SPECIFIC OR AD VALOREM DUTIES.

This incidental reference to one of the defects of an *ad valorem* duty leads us to a further consideration of that form of tariff rates.

A duty to afford protection to an industry must equal the difference between the foreign and the domestic conversion cost. That difference is, in respect to any given article, a *constant* factor.

The only duty that will always equal such difference must therefore be a "constant" also; and the only form of duty that meets this requirement is one that is specific in form, — *i.e.*, one that is assessed at so much per unit of quantity, as, for example, per pound, per square yard, per gallon, or per cubic foot, according to the nature of the commodity.

If the duty is in *ad valorem* form, — *i.e.*, assessed as a percentage of the value of the commodity, — the amount of the duty is a *variant*, fluctuating constantly with changes in the cost of the raw material of which the commodity is made.

To illustrate this, assume that the foreign cost of conversion of a given article is 20 cents per pound and the domestic cost of conversion (*i.e.*, labor and expense) is 40 cents: the difference, or 20 cents per pound, represents the amount of duty required to protect the domestic manufacture of such article. Let us further assume that the cost of the raw material required for its manufacture in Europe is at the present time 30 cents, the total foreign cost being $20 + 30 = 50$ cents.

The necessary duty can be laid either at the *ad valorem* rate of 40 per cent or the specific rate of 20 cents per pound, and at the moment either form will yield the required 20 cents protection.

But suppose the cost of the raw material declines from 30 to 15 cents, so that the total cost becomes for raw material 15 cents, conversion 20 cents, — total 35 cents. In such a case a specific duty of 20 cents per pound is still adequately protective, while the *ad valorem* rate of 40 per cent yields but 14 cents duty, or 6 cents per pound less than necessary to continue the domestic manufacture.

On the other hand, suppose the cost of the raw material advances from 30 cents to 40 cents: the whole cost will then be $40 + 20 = 60$ cents, and an ad valorem duty of 40 per cent on this cost would yield 24 cents, or 4 cents per pound more than necessary to protect the domestic manufacture. But with a specific duty of 20 cents the protection still remains constant, as needed, to bridge the difference between the foreign and domestic conversion cost.

Low prices of raw material are usually coincident with depressed business, and at such a time, when competition is most severe, profits disappear, the decreasing duty under an ad valorem rate invites new and killing competition to the domestic producer; and the fall in domestic prices, being accelerated by a simultaneous and proportionate fall in the amount of duty, causes increased distress to merchants through the greater loss in the liquidation of their stocks of merchandise.

Per contra, rising prices of raw material are usually coincident with active business and abundant demand. At such times competition is reduced to a minimum, for there is enough trade for all. Under such circumstances the rise in prices is apt to be stimulated beyond the increase in cost of raw material by augmented profits; and it is under such conditions that increased competition is needed to protect the buyer from exorbitant advances. If, however, the duties are in ad valorem form, competition is more effectively barred than ever, for the higher the raw material goes, the greater the foreign cost, and so the more is the amount of duty produced by the ad valorem rate. Then it is that the domestic producer receives not merely the protection normally needed, but has the protective duty enhanced so that, with the active demand then existing, it may enable him to augment his normal profit. The effect of the specific duty is quite the reverse, for remaining as it does at the one level, if domestic prices tend to advance too much, the doors to foreign competition automatically open, and an effective check is at once imposed upon any increase in domestic prices beyond that made necessary by increased cost of raw material.

It is also to be noted that specific duties are more satisfactory to the importer, because his foreign purchases will always be enhanced by the same amount of duty, and the amount of duty paid by himself and his competing importer on identical importations will be the same, while under ad valorem rates the differences in prime cost which occur through fluctuations in the foreign market are still further increased by the variance of the duty.

From the point of view of the government, specific rates are greatly to be preferred, the important desideratum being that its revenue should be stable and dependable. We have already noticed that low prices are coincident with dull business. Consequently, at the very time when the volume of importations and the revenue produced thereby are greatly reduced because of a depressed condition of business, the revenue is still further depleted because the duty has to be computed as a percentage upon low prices.

Under opposite circumstances, when business is most active and imports are large, prices are high. The government is not only enjoying large revenue because of a large volume of imports, but the revenue is further increased by being computed as a percentage upon higher prices. The revenue becomes redundant: large amounts of circulating medium are locked up in the Treasury at a time when needed in the channels of trade to finance the increased operations of business.

Whether considered as a matter of protection to domestic manufacturers or as one of government revenue, ad valorem duties are so susceptible to the fraud of undervaluation as to be highly objectionable. It is undoubtedly true that customs frauds have been perpetrated in respect to commodities that were subject to specific duties, but such frauds involve connivance upon the part of persons engaged in the customs service, and a proper vigilance upon the part of government officials ought to make such collusion nearly impossible. Moreover, such frauds of collusion are just as possible with ad valorem duties as with specific: while through undervaluation, without participation by any agents of the customs, ad

valorem duties permit vastly greater frauds *in addition* to such as may be effected by corruption.

Because of the serious objections to ad valorem duties, practically every Secretary of the Treasury for the last half-century, irrespective of party, has at one time or another advocated the use of specific rather than ad valorem rates. In Appendix III. we take leave to quote some of the opinions officially expressed by Treasury officials. Honest importers have been equally urgent in opposing the use of the ad valorem form in any cases where the specific could be applied. We subjoin also some notable opinions from this interest.

So objectionable from every point of view have ad valorem duties been found that other governments have adopted it as a settled policy that, whenever practicable, import duties should be laid in specific form. A recent investigator of this subject has written :

“In Austria, Switzerland, Italy, Belgium, France, Germany and England the duties are specific. The French tariff has 800 numbers, of which 9 are ad valorem. The German has 946 numbers, all specific.”

Only recently a despatch from Brussels reported the purpose of the Belgian government to change some of its few ad valorem rates to specific because of the gross undervaluations by importers which the ad valorem rates made possible.

MERITS OF COMPOUND DUTIES.

There are, however, some kinds of manufacture to which it is not practicable to apply a purely specific duty. But for many of these it is possible to employ a compound duty; that is, one partly specific and partly ad valorem.

For classes of commodities which vary greatly in their units of value and in the ratio of labor cost to material cost, and which cannot be so grouped that purely specific rates can be applied with even approximately equal incidence, the compound duty is most suitable, obviating in a considerable degree those features of purely ad valorem duties which

have made them objectionable, not only from the protectionist point of view, but equally to the government and the honest importer. The compound duties are especially applicable in the case of cloths in which the ratio of labor or conversion cost to total value increases as the value of the raw material decreases, as in samples shown in Appendix IV. The cloth containing the cheaper raw material needs less compensatory duty, but requires a larger ad valorem rate to produce (when computed on its lower value) the same factor of protection. This deficiency is automatically offset by absorbing part of the specific rate which is not required as compensatory duty.

This principle applies particularly in respect to dress goods, upon the cheaper forms of which the ad valorem rate, sufficient for more costly goods, would produce a sum altogether inadequate to cover the difference between the cost of manufacture here and abroad.

Opponents of the present wool schedule habitually discuss the present specific duties as though intended always and only as compensatory for the raw material duty, and in those cases wherein the specific duty is obviously more than necessary to compensate for the wool duty the rate is criticised as excessive and unwarranted, whereas for many sorts of goods, and particularly those composed of the cheaper kinds of material, it was thoroughly understood when the law was enacted that the ad valorem rate was not in itself protective because of the low values upon which it was computed, and the high ratio of manufacturing cost. As to such goods, the specific portion of the compound duty was known to be partly protective.

There are many compound duties in other schedules of the tariff law upon commodities in which the raw material is free of duty and upon which no compensatory rate is necessary, and in these the whole of the specific portion of the compound duty is protective, just as it is partly protective in the cases of cotton warp cloths and other goods which are made in part of the cheaper kinds of material.

THE WOOL DUTY AND ITS PART IN THE TOTALS.

We have in this general statement endeavored to indicate, first, the conditions under which the woolen industry has been developed, and then some of the complicating factors which must necessarily be taken into account in the determination of rates of duty on the products of wool.

Of the latter the most important remains to be noted; that is, the wool duty. Whether this duty be levied for the purpose of protecting the industry of wool growing or with no other object but that of raising revenue, neither result can be attained unless the manufacture of wool can be profitably carried on in this country. Unless the home-grown wool can be used here, it must be sold in the world's market at the free-trade price less transportation cost to Europe. If the growers of wool are to be advantaged in any degree by the tariff on wool, or if the government is to derive any revenue from a duty on imported wool, the wool must be used in American mills. And for either or for both purposes an amount must be added to the protective duty on all imports of woolen articles sufficient to equal the duty that would have been levied on the wool required to make them if the raw wool had been imported.

The American mill must, independently of any protective duty, be placed upon an equality with its foreign competitor in respect to the cost of raw material. This can be accomplished only by levying upon manufactures of wool a so-called compensatory duty equal in amount to what would have been charged on the quantity of wool necessary to make the imported article if the wool had been imported and manufactured here. So much of the whole duty as correctly represents the wool duty on the wool required to make the article is merely compensatory, and is in no way protective to the manufacturing industry. If woolen goods could be made as cheaply in this country as elsewhere and there was no need of a protective tariff, it would still be necessary to have this compensatory duty on woolen goods if wool were subject to duty. It is very necessary that this fact should be

understood, and that it should never be obscured, for most of those who discuss the wool tariff with superficial knowledge refer to the whole duty on woollen goods as though it was all for the benefit of the wool manufacturing industry, whereas in point of fact the actual protective duties on wool manufactures are generally no more than those laid upon other textiles for which no compensatory duty is necessary because the raw materials thereof are not subject to duty.

This Association enters no objection to a duty on wool. If necessary to the continuance and further development of wool-growing in this country or for the raising of governmental revenue, we as protectionists approve it. We merely emphasize the fact that neither government nor wool-growers can derive any advantage from a duty on wool unless the wool can be used in American mills, and it will be possible to use it in American mills only if the aggregate duty on woollen products includes full compensation for the wool duty and a protective duty adequate to cover fully the higher costs of manufacture. In any comparisons of the duties of the woollen schedule with others, it is to be noted that, unlike the cotton or the silk trade, the woollen trade has a duty upon its raw material; and that the only wool duty paid upon foreign woollen manufactures is the compensatory rate paid upon their import into the United States.

When due account is taken of these facts, much of the unjust and false criticism that has been directed against the wool schedule becomes pointless, for the net protection realized by the woollen trade is quite comparable with that of most of the other industries which exist in this country by reason of a protective tariff. The net protection actually availed of in the rates on woollen products is unassailable, unless the fundamental principles of the protective system itself are wrong.

SOME DEFINITE SUGGESTIONS.

The domestic industry having then been developed to a point where it is capable of supplying the requirements of the country in woollen products, with but normal, or less than

normal, realizable profit margin (wages and all other conversion costs being so much higher than abroad, and productive efficiency here no greater), it must be evident that the limit to reduction of duties without injury to legitimate business and without causing curtailment to wages of labor is at the amount of the existing duties that are actually availed of in the prices of domestic products. If there are any articles of domestic manufacture for which the whole present duty is not needed, it can be safely asserted that in respect to such articles the excess is not availed of, and there can be no objection to a reduction by the amount of such excess, provided these articles can be so grouped or classified for duty purposes that the reduction will apply to them without affecting other articles for which the present protective duty is fully necessary, and provided the reduced rates are made in such form that a decline in foreign values will not still further reduce the amount of duty until it is below the line necessary for protection.

The infinite variety of articles embraced in the woolen schedule makes it quite impossible to specify the exactly proper rate for every group, and so to define each group that it would include only such articles as the rates for that group properly and exactly apply to. We have already pointed out that ad valorem rates wholly fail to meet the requirements of the case. The nearest to a general statement that can be made is that the present ad valorem rates in addition to whatever compensatory allowance is necessary to cover the wool duty are in most cases the least that would be sufficiently protective to continue the industry in its present proportions and with its present rates of wages, that in the case for which it is not practicable to devise duties wholly in specific form the rates should be compound with at least half of the total sum specific, that for yarns and tops the rates should be specific, and they can readily be levied in that form with more exact justice to all interests than by any other method. In the case of some of the cheaper forms of dress goods and cloths the present ad valorem rates would not be protective, because, as has already been explained, the conversion cost

does not decrease in the same ratio as the raw material cost : hence a percentage of total value that would be adequately protective for goods of medium value, when applied to those of low value, would not produce amounts proportionate to the difference in manufacturing cost of the cheaper goods. Under the present tariff, as has always been thoroughly understood by those who have given the subject more than superficial attention, the deficiency in the ad valorem rate on low-priced goods is made up in the specific rate, which for such goods is and was always intended to be partly compensatory and partly protective.

We subjoin in Appendix I. some particulars relative to the protective requirements of tops, yarns, cloths, and dress goods.

AS TO THE PROPOSED BILLS.

We do not know whether or not the wool bills acted upon during the last two sessions are under consideration at this time or whether it is the purpose of your committee to frame an entirely new bill. We shall not, therefore, enter into any detailed discussion of those proposals further than to express our confident opinion that the manufacture of wool from its raw state to finished fabrics would have been utterly ruined by the enactment of either the House bill in its original form, the Senate substitute, or the compromise bill agreed upon in conference, which was finally passed by Congress.

No argument from us should be necessary to support this opinion. The committee which introduced the original bill clearly understood that such would be the effect, for in the accompanying report it estimated that under the proposed bill importations of wool manufactures would be increased to the amount of nearly \$41,000,000 foreign value, which according to the committee's data would be equal in present domestic value to over \$77,000,000 of additional supplies. As the American mills are now capable of fully supplying the home market, and as there is no other outlet possible for their products than in our own market, it is evident that at least, if the case is no worse than the committee estimates it,

\$77,000,000 worth of annual domestic production must be cut off entirely if that bill were enacted.

This alone would throw out of work upwards of 35,000 employees now directly engaged in the manufacture of the goods that would be displaced, not to mention the vast additional number required to provide all the mill and other supplies absorbed in this manufacture. But beyond this the introduction of so large an increase of foreign goods and the consequent stoppage of machinery would of necessity create such competitive conditions that it would be impossible to make even the remainder of the goods except at a great loss, which must ultimately cause the discontinuance of operations and general liquidation of the business of woolen manufacture.

This is upon the assumption that the committee's estimate of increased importations is correct. But we can see no reason to expect that, if *additional* imports of the present domestic value of nearly \$80,000,000 could be imported, the quantity would be limited to that amount. On what theory is it to be supposed that, if the conditions are made so much more favorable to the foreign manufacturer, a quantity so large, but no larger, would be imported? Why so large an amount, but no more? If the new rates will permit the displacement of \$80,000,000 of present value, why not practically all? Where is the line of demarcation? Upon what principle of exclusion would the rates of the House bill keep out a quantity sufficient to supply the remainder of the domestic consumption of wool goods?

The compromise or conference bill, while increasing the rates over those of the House bill on both wool and manufactures of wool, maintained substantially the same difference between the rates on raw wool and goods, so that the net resulting difference in duty was so small that in respect to most cases the difference would have little or no significance; and the committee's estimate of importations under the original bill may be safely taken to apply with just as much accuracy to the conference bill as finally passed.

In any reduction of the tariff a sufficient period should be allowed between the taking effect of the new duties on raw

materials and the taking effect of the new duties on the finished products. Otherwise the manufacturers of the United States will be seriously discriminated against by American law-makers in favor of the manufacturers of Europe. The woolen business is a business of two distinct seasons, and any new tariff on woolen manufactures ought not to be put into effect in the midst of either, but rather should become operative at the end of one season and the beginning of the next. The soundness of this principle of legislation was acknowledged by Chairman Wilson and the other authors of the Gorman-Wilson tariff law, which as to free raw wool went into effect on August 27, 1894, and as to manufactured products on January 1, 1895. This plan left an interval of transition of more than four months, in which American manufacturers could gradually dispose of goods produced on a relatively high level of wool values, and could also begin the fabrication of goods produced on the lower level of wool values which free wool had introduced. That plan was fair to American mills and fair to the public. It softened the shock of changing economic policies, and enabled American manufacturers to meet on more nearly equitable terms the intensified competition of their rivals abroad. Chairman Wilson said¹ of the expedient that it "was a matter of very great importance, and one to which the majority members of the committee have given as much anxious investigation as to any question connected with the whole tariff bill." Mr. Wilson added that "the committee seemed to be relentlessly driven to the conclusion" outlined above. This action affords good, authoritative precedent for the present Committee on Ways and Means.

One severe handicap upon American wool manufacturers of which no cognizance is taken in the proposed bill is the higher cost of mill buildings and equipment in the United States. The Tariff Board in the course of its inquiry had estimates prepared by leading mill architects in this country and in England for buildings of the same size and construction and equipped with machinery to produce similar goods.

¹ *Congressional Record*, vol. 27, pp. 921, 922.

The Board found that the cost of building and equipment in this country for a carded woolen mill was 49 per cent, for a wool preparing and combing mill about the same figure, for a worsted spinning mill 67 per cent, and for a worsted weaving mill 43 per cent greater than in England. There is a duty of 45 per cent upon imported textile machinery, to which packing and shipping charges add 20 per cent, and the cost of freight and erection from $7\frac{1}{2}$ to 10 per cent additional. The cost of buildings alone in the United States is between 45 and 51 per cent greater than in England. The higher cost of buildings and equipment compels the American manufacturer to pay from 43 to 47 per cent more than the English manufacturer for his working plant, requiring, of course, a larger capital and imposing heavier fixed charges on the business, including the inevitable allowance for depreciation.

UNJUST CRITICISMS OF THE EXISTING LAW.

It is not within the purpose of this presentation to reply to the many misleading and often altogether false statements relative to the existing schedule which have been made by some of its opponents. Such statements are in large part of so contradictory a character as to be self-answering. But there were some statements made by the advocates of the recently pending House wool bill that are so palpably erroneous that we are constrained to refer briefly to them, because the rates contained in that bill were justified upon these premises, which, if proved unsound, necessarily make the rates fundamentally wrong that were predicated thereon.

One such statement asserts that the labor cost in the manufacture of woolen goods in the United States is but 20 or 21 per cent of the whole cost. As proof of the alleged fact, figures were quoted from the census returns to show that the total wages paid bear about the percentage mentioned to the total reported value of woolen manufactures. Those who have had experience in the study of industrial statistics know that, valuable as such returns may be when used with a full knowledge of their qualifications and limitations, without such knowledge they are worse than valueless, because grossly misleading.

The trained statistician knows that in making the census returns each establishment reports wages paid by it, and that those wages are returned by no others as wages, but that in reporting the value of its product each establishment includes *in its raw material* the cost of the wages of every preceding stage of manufacture. Hence there are as many duplications of the prime cost of the raw material as there have been separate stages of manufacture reported. Thus, then, the whole sum of wages appears without any duplication, while the total value of finished products contains one two, three, or more duplications of all the wages but those of the last stage and an equal number of duplications of the prime cost of material. To illustrate:

A	buys raw material costing.....	\$50
	adds labor costing.....	10
	adds expenses costing	2
	adds profit	3
	<hr/>	
	sells to B as finished product for.....	\$65
B	adds labor costing.....	20
	adds expenses costing	10
	adds profit costing	5
	<hr/>	
	and sells the product to C for.....	\$100
C	adds labor costing	30
	adds expenses costing	15
	adds profit.....	5
	<hr/>	
	and sells the product to D for	\$150
D	adds labor costing.....	50
	adds expense costing	20
	adds profit.....	10
	<hr/>	
	and sells his product for.....	\$230

When these transactions have been converted into industrial statistics, they take on this form:

Return by	Raw Material.	Labor.	Expenses.	Profit.	Value of Product.
A	\$50	\$10	\$2	\$3	\$65
B	65	20	10	5	100
C	100	30	15	5	150
D	150	50	20	10	230
	<hr/>				
Totals.....	\$365	\$110	\$47	\$23	\$545

from which it would seem in this illustration that the ratio of labor to raw material is as 110 to 545, or about 20 per cent, when it is in truth as 110 to 230, or about 47 per cent.

In the statistics for wool manufacture just such duplications are made. A combor buys wool as raw material; makes it into top which the spinner buys and turns into yarn. This in turn is bought by the weaver, who fabricates it into cloth, which may then be sold to a factor for whom it is dyed and finished as the final product of wool manufacture. The wages paid by each are reported as wages but once, but the values each reports as finished product and as raw material contain duplications in a sort of geometrical ratio.

In the woolen industry the subject is complicated because some establishments perform all the processes from raw wool to finished fabric, and the returns from such would afford reliable data for the computation of the percentage of labor cost so far as concerned the particular products of such mills, but not for the products of other kinds of mills. Some mills both comb and spin; some do not comb, but spin and weave; and many others carry on but one of the several branches of top making, yarn spinning, and weaving.

There are no available statistics by which the *average* labor cost of woolen goods can be determined. The proportion of labor to material cost differs widely in different fabrics. For example, in very heavy cloths made of the costliest stock the proportion of labor cost must obviously be very much less than in cloths of very light weight made of equally fine stock. There is such an enormous diversity of woolen products that no one could possibly form a reliable estimate as to average ratio of labor cost; and if it could be done it would still only be an average, therefore valueless in respect to any conclusions regarding the labor cost in other than average goods. We believe, however, it is well within the truth to say that for a large amount of woolen goods the conversion cost is fully 40 to 50 per cent and for a considerable portion as much as 60 per cent.

Since, then, the rates in the House wool bill were justified upon a theory that the labor in woolen goods was but 20 to 21 per cent, those rates are utterly irreconcilable with the

preservation of the present scale of wages, when the ratio of labor cost proves to be vastly in excess of the percentage so mistakenly assumed.

Then there was an argument based on the reasoning that if statistics showed the labor cost of woollen goods in English mills to be a certain per cent of the whole, and statistics here showed the American labor cost to be the same rate per cent, then the industry in the United States was at no disadvantage in respect to labor and needed no protection. It would not be worth wasting time over such a statement, were it not that it was seriously presented to prove that the rates of the House bill would not be prejudicial to labor engaged in wool manufacture. A simple example in arithmetic will show upon how false an hypothesis that argument was founded :

	In the United States.	In England.
Suppose the total cost of a certain article is,	\$1.00	\$0.50
and that the labor cost in the respective countries is . .	.40	.20

then in each case the labor cost is 40 per cent of the total cost, and, according to the inventor of the argument under criticism, there would be no handicap to competition upon the part of the manufacturer in the United States. But just plain sense shows that, notwithstanding the similarity of percentage, the labor cost in this example is just twice as much in the United States as in England.

Another fallacy is the assumption, often made, that the American price is always and necessarily equal to the foreign price plus the duty. We have already pointed out that, if this were true, the profit upon many of the cheaper sorts of goods would be so much larger than on the better qualities that domestic production would all be diverted to these less expensive kinds of manufacture. But, besides this obvious fact and the knowledge of common experience, there is the evidence obtained by the Tariff Board, as, for example, that given on page 14, Volume I., of the Board's report on the wool tariff, which completely refutes this false dictum and shows, by way of example, that for 16 varieties of cheap fabrics the domestic price exceeds the foreign by an average of only 36 per cent of the total duty.

A companion error is the one which alleges that the whole duty on woolen goods inures to the benefit of the manufacturer, ignoring the enhancement in cost of raw material by the wool duty, the greater cost of labor, of machinery, and of all kinds of supplies, which in the aggregate absorb nearly all of the duty that can be availed of in domestic price, leaving to the manufacturer a profit generally less than that obtained in woolen manufacture abroad or in any of the other great industries of this country. This error has been made by implication by one who so well knew the flaw in the reasoning that upon a different occasion, when justifying a rate on raw wool advocated by him, rather than a higher rate, he said:

“The reason for not maintaining the high tax . . . on raw wool was that if raw wool was taxed, *as a matter of justice*, not as a matter of protection, there must be a tax on the finished product as a compensation.”

With this clear conception of a simple elementary truth, it is inconceivable that any one should continue persistently to imply that the entire duty on wool products was for the benefit of the manufacturer.

It has also been said that a great reduction ought to be made in the duties on woollens because the industry is controlled or dominated by a “trust.” So far is this from being true that upwards of 900 separate and independent establishments are constantly engaged in the most active and acute competition. The largest single organization produces less than an eighth of the total output; and by its rivals its influence is recognized chiefly as a factor making for lower, not higher, prices. Upon this question the testimony of business rivals should be conclusive; but, if corroborative evidence is desired, it is suggested that the customers of the woolen mills be interrogated upon the subject. So confident are we that there is not now and that there never has been any combination in restraint of the most intense domestic competition that we solicit a searching investigation of the facts. In contrast to this situation in the domestic industry we invite attention to the very extensive amalgamation of

previously competing establishments that has taken place in various branches of the English woolen trade.

The foregoing are but a typical few of the arguments by which it has been sought to show that the rates of the House bill would permit the American woolen industry as now developed to continue without diminution of the wages paid its employees. The obvious errors in the reasoning must be convincing as to the unsoundness of the conclusion.

It is appropriate upon this occasion to take note also of a misrepresentation of another kind, which has repeatedly had official endorsement from those who have not considered it necessary to verify the statements of sensation-mongers before adopting them as their own. It is said that the form of the present wool tariff was agreed upon at a conference between manufacturers and growers in the year 1866. The effort is made to convey to the public mind that this was the work of some dark and wicked conspiracy or combine. This happened so long before any of those who are now active in the industry had a voice in its counsels that we might be under the necessity of believing this calumny, had not those who participated in the conference been so innocent of wrong that they had the proceedings of the conferences (for there were several of them) all stenographically reported, and copies of these verbatim reports of everything said and done were transmitted to the United States Revenue Commission. The Commission incorporated them with its own report when printed as a public document. During various tariff debates throughout many subsequent years the printed account of the proceedings of the conferences between the growers and manufacturers was familiar to public men and freely quoted. And during the debates of the last enacted revision (1909), at the instance of those who advocated adequate protection to the woolen industry, that part of the report of the Revenue Commission which contained the full proceedings of the conferences between growers and manufacturers was reprinted as a Senate document and made available alike to advocates and opponents of the wool schedule.

The effort to convey an impression that there was anything irregular or improper about the conference between

wool-growers and manufacturers is unwarranted by facts and is most unjust. The conference was held by official invitation of a representative of the Federal government. The purpose was to aid the government in formulating a tariff that would prove a practicable revenue measure and at the same time develop both branches of the industry. The experience of nearly half a century since elapsed has proved how successfully that purpose was accomplished, for the woolen schedule has been one of the most productive of the government's sources of customs revenue, and the domestic woolen manufacture has been developed from comparative insignificance until it is now able to supply all the woolen goods of every kind required by the greatly increased population of the United States, the growth of wool manufacture having much exceeded the increase of population.

And what more natural or more sensible than that the technical skill of those having practical experience in these industries should be employed to recommend a method of applying the duties? In European countries (notably in Germany) this is done as a matter of course. Only here and now have technical knowledge and practical experience come to be considered a bar to public usefulness with respect to anything related to the subject of such knowledge or experience.

As an appropriate summary of our case, we conclude with the following quotation from a statement recently made by one long identified with the industry:

"Those engaged in the woolen industry ask no special privilege, seek no advantage but that of equal opportunity, neither possess nor desire any beneficence of government that is not freely available to all citizens. They are in no sense beneficiaries of the tariff except as they share the benefits for the common advantage of all.

"There are no mysteries about the conduct of the woolen industry; every essential fact is accessible.

"It invites the most searching investigation and comparison as to the returns it makes to capital, the wages of its labor, the acuteness of its competition, and the facility with which those of limited financial resource can engage in its various branches under conditions favorable to success.

"It depends upon no secret processes, no controlled patent rights, nor upon exclusive franchises.

"In no branch of the woolen business, from the production of the wool to the distribution of the finished clothing, is there any trust or combination in restraint of trade. No individual, nor corporation, nor group of either, exercises a controlling influence in the industry.

"Nor do we know of any instance in which our trade has been concerned in violations of the Federal laws relating to interstate commerce. Although the transactions of the American woolen manufacturers with the United States Customs Service involve amounts of great magnitude, they have been singularly free from even the suspicion of undervaluation frauds.

"It is noteworthy that none of the great accumulations of wealth in this country have been made in the woolen trade. Vast individual fortunes have been acquired in transportation, banking, mining, real estate; in wholesale and retail trade; in the use and development of natural resources; in the construction of public utilities; in the publishing of newspapers, and in many other kinds of business, including some few varieties of manufacture; but none such in the woolen trade, though many of its establishments have had a continuous existence of from fifty to one hundred years, and were preëxistent to the beginnings of most of the great American fortunes.

"The products of the woolen industry are not transported at government expense. Its properties are not improved and enhanced in value by expenditures of public funds. It is not assisted in the solution of its technical problems by experiment stations and research laboratories conducted by the national or State government. All of which advantages are enjoyed by other classes of our fellow-citizens.

"Believing in the system of protection for the good of the whole people, the woolen manufacturers cheerfully acquiesce in the application of that principle to the raw material they use. They have not presented the spectacle of advocating adequate protection on their finished products while opposing such rates on the products of others which they require."

NATIONAL ASSOCIATION
OF WOOL MANUFACTURERS,

By JOHN P. WOOD, *President*.

APPENDIX I.

REPORT OF THE COMMITTEE ON TOPS AND YARNS.

TOPS.

In considering duties on combed wool or tops, which represent the first stage of manufacture between scoured wool and worsted yarns, several conditions surrounding the industry abroad exist which for the most part are lacking in this country and exert an influence in any comparison of costs between this country and abroad. These conditions are largely as follows :

In Europe the top trade generally is subdivided between the merchant, who owns the raw wool and is known as a top maker, and the wool comber, who owns the machinery by which the wool is washed, carded, and combed, and delivered back to the top maker for a certain fee per quantity ; the expenses of interest upon material, buying, sorting, clerical hire, warehousing, etc., falling upon the merchant, while those of labor in plant, necessary supplies, interest on plant, and other overhead charges are borne by the wool comber.

These combined expenses of the top maker and wool comber, while they bear relationship to each other here and abroad, yet in any country will vary on the different qualities of wool principally on account of length of staple and fineness of fiber. So gradually do these differences of quality and length of staple blend themselves into one another that it is impossible to make for duty purposes different classes of tops, so it has been universally conceded that, by considering the costs at home and abroad of combing the fine or merino tops and arranging duties which will care for this difference, such duties would amply cover the difference in conversion cost of medium and coarse wools into tops. An examination into the costs of wool combing abroad reveals the fact that in Bradford the commission fee for combing merino tops is $4\frac{1}{2}$ cents, and we believe that a safe estimate of 2 cents per pound would embrace the expenses of the merchant, making a total cost of conversion from raw wool into finished tops of $6\frac{1}{2}$ cents per pound. In our country abundant testimony is at hand to show that in the woolen trades conversion costs are 100 per cent above those of Europe, so that to equalize by duties the increased cost of combing raw wool

into tops, considering solely the merchants' and wool combers' expenses and eliminating enhancements which may be incident to a duty on raw wool, a rate of 7 cents per pound would be required to accomplish this object.

As previously stated, tops are the first resting-place in the process of converting wool into worsted goods, and consequently the conversion cost of the same represents the minimum of expenditure in the total cost comprehended in the several necessary operations, and is, with but slight variations from year to year, in this country as well as abroad, a fixed amount. Wool, on the contrary, is a commodity of wide variation in values, and consequently a duty, to be effective under all the varying changes of market conditions, without being excessive in periods of high values of wool or insufficient when wool is selling at a low price, should be levied in specific form. To illustrate the effect which the fluctuations occurring in raw wool have upon the necessary duty levied on tops of 7 cents per pound in specific form, we direct attention to the accompanying table showing the wide range of prices which has occurred in the last twelve years in combed wool or tops and the variation in ad valorem equivalent which a duty of 7 cents per pound upon the foreign values of tops produces:

Quality of Tops.	Low Price.		High Price. •		Ad Valorem Duty required to equal- ize Conversion Cost of 7 Cents per Pound.	
	Date.	Price.	Date.	Price.	Low Price.	High Price.
60s	April, 1901	\$0.33	October, 1907	\$0.59	21.21%	11.86%
64s	May, 1901	.37	October, 1907	.60½	18.91	11.57
70s	April, 1901	.40	October, 1907	.62	17.05	11.29

We also direct attention to the fact that under the Gorman-Wilson law of 1894-97, with wool upon the free list and an ad valorem duty of 20 per cent on combed wool or tops, with merino tops selling at 35 cents abroad, a competitive market for the product of our combs with the product of the combs of Bradford and the Continent existed. During the fiscal years of 1895, 1896, and 1897, and part of 1894, 9,223,788 pounds of tops were imported into this country, paying a duty of \$610,713 in revenue to the government.

WORSTED YARNS.

Any consideration of a duty on worsted yarns having for its purpose the continuance of the industry in our country under conditions of employment as general as exist at the present day will, as in the case of worsted tops, have to take into account the manner in which this industry is established abroad, in order to form a proper judgment of manufacturing costs there as against American conversion costs.

In England and upon the Continent the business is largely subdivided between the merchant, who owns the combed wool or tops, and the commission spinner, who spins the worsted yarns for a fixed fee per quantity. The merchant, as in the case of tops, has to bear the interest on the materials, the warehousing and transportation demands, and the clerical and office outlays incidental to this business. The spinner in turn takes care of the wages expended about his plant, with necessary supplies for its operation, light and power, insurance, interest, and the general overhead charges incident to this kind of mechanical operations.

The costs of commission spinning for various sizes and counts of worsted yarns are thoroughly established in Bradford, and we would quote on standard sizes in twofold yarns to-day:

Quality.	Cost.			
24s	8 cents per pound.			
32s	10	"	"	"
36s	11	"	"	"
40s	12	"	"	"
50s	16	"	"	"
60s	24	"	"	"

These commission prices carry with them a profit to the spinner, which profit, it might be fairly said, would be an amount sufficient to embrace the merchant's charges before referred to, so that the net cost of converting combed wool or tops into finished worsted yarns of standard sizes could be reckoned upon the commission charge for various counts based on the conditions just named.

Taking the manufacturing costs in this country as double those of Europe, a duty of these amounts on these specific numbers or such subdivision of the same as to count or size would be necessary to safeguard the American market against the product of foreign machinery.

In the spinning of yarns, we have eliminated a factor which we previously referred to as having a marked influence upon costs in the combing of wools, and that is the question of quality and length of fiber. In the converting of tops into the sizes of worsted yarns to which they can economically be spun, the conversion cost varies but little between a fine and a coarse quality of stock; therefore, the difference between conversion costs abroad and here can be closely approximated in a constant figure from year to year. To meet this requirement we propose an arrangement of duties on yarns as follows :

The word "number" appearing in this paragraph, whether applied to woolen or worsted yarns, shall be the number of hanks per pound, a hank being a measure of 560 yards of single yarn or roving.

On tops advanced by process of manufacture to any number of sliver or roving or single yarn up to single twelves, the duty shall be twelve cents per pound.

On all numbers exceeding single twelves and up to and including single forties, the duty shall be twelve cents per pound plus two-tenths of a cent per number per pound on all numbers in excess of single twelves.

On all numbers exceeding single forties and up to and including single sixties, the duty shall be eighteen cents per pound plus four-tenths of a cent per number per pound on all numbers in excess of single forties.

On all rovings and yarns advanced beyond the condition of singles by grouping or twisting two or more rovings or yarns together up to and including number twelves, the duty shall be two cents per pound in addition to the foregoing duties on single yarns.

On all numbers exceeding twelves and up to and including forties, the duty shall be two cents per pound plus one-tenth of a cent per number per pound on all numbers in excess of number twelves, in addition to the duties on single yarns of corresponding numbers.

On all numbers exceeding forties up to and including sixties, the duty shall be five cents per pound plus two-tenths of a cent per number per pound on all numbers in excess of number forties, in addition to the duties on single yarns of corresponding numbers.

On all numbers exceeding sixties the duty shall be nine cents per pound, plus three-tenths of a cent per number per pound on all numbers in excess of number sixties, in addition to the duties on single yarns of corresponding numbers.

On all of the above when bleached, dyed, colored, stained, or printed, the duty shall be five cents per pound, in addition to the other duties prescribed in this paragraph; and if singed or gassed there shall be a further addition of three cents per pound.

For the purpose of showing the influence these necessary rates, reflecting difference in conversion costs between our country and abroad, would have if transformed into ad valorem equivalents, taking yarn prices at the high and low figures in Bradford which they have reached during the past twelve years, we insert below a schedule extended in ad valorem equivalent:

STATEMENT SHOWING VARIATION OF AD VALOREM EQUIVALENT UPON HIGH AND LOW VALUES OF YARNS, 1901 TO DATE, WHEN SPECIFIC DUTIES PROPOSED ARE APPLIED.

Count.	Low Price. Date.	Price. Cents.	Specific Duty. Cents.	Ad Valorem Equivalent. Per Cent.	High Price. Date.	Price. Cents.	Specific Duty. Cents.	Ad Valorem Equivalent. Per Cent.
2/24	Jan., 1902.	25½	173	69.01	May, 1906.	53½	17	32.9
2/32	Jan., 1902.	32½	20	61.54	May, 1906.	63	20	31.7
2/36	July, 1901.	42	21	50.5	May, 1906.	67	21½	31.6
2/40	April, 1901.	45	22½	49.8	Oct., 1907.	76	22½	29.5
2/48	May, 1901.	52	27½	53.5	Oct., 1907.	81	27½	34.3
2/60	April, 1901.	61	35	57.4	Oct., 1907.	91	35	38.5

Before leaving the subject of combed wool and yarns, it might be well to add that the industry in our country, due to existing revenue laws, has developed to substantially the full requirements of the American people for both tops and worsted yarns, and that conversion costs established and used in figures quoted above are predicated upon full employment of machinery. Any substantial importations from abroad would lessen this employment, with the effect of correspondingly enhancing unit costs of production and making correspondingly less effective any figures upon conversion costs which have been used in these computations.

REPORT OF THE COMMITTEE ON CLOTHS.

Eliminating the compensatory duty required for such duty as may be placed on wool, we arrive at the duty necessary to protect American manufacturing costs in the following manner:

It must first be noted that we have to deal with fabrics of marvellous diversity both in material and in construction, and consequently great variation in the proportion of conversion cost to total cost. What are the facts as to the excess of our conversion costs over the English?

In Volume III. of the Tariff Board Report, page 692, we find the American and English conversion costs of 46 fabrics classi-

fied as to character. The average excess of the American costs in each group is as follows:

Staples and piece dyes.....	105	per cent.
Serges	123	" "
Fancy woollens.....	131½	" "
Fancy worsteds	145	" "
Women's wear, all wool	111	" "
Light-weight women's wear, all wool.....	116½	" "
Cotton warps	108	" "

This statement indicates that we need a protection of from 105 per cent to 145 per cent of the conversion cost to place us on the same basis as our English competitors, but, as it would be impracticable to classify fabrics and apply a different rate to each class, we must adopt one rate for all. A fair average would be 125 per cent, and this would be slightly more than necessary on some classes and less than the required amount on others.

In order to apply this amount of protection on the conversion cost, it is necessary to determine what per cent the conversion cost is of the total cost. An examination of the costs of a great diversity of fabrics shows that this percentage varies from 30 to 70 per cent, and there are some fabrics made of very cheap material in which the conversion cost is even higher than 70 per cent. The average of all is certainly not less than 45 per cent, and, applying the rate of 125 per cent before mentioned to this, we have 56 per cent as the minimum rate on the total value required for protection on the average fabric. We are, however, certain that a rate of 60 per cent, with the addition of all possible safeguards against undervaluation, will not unduly protect any class of fabrics, and it is evident from the foregoing figures that there are some which would lack the necessary protection.

It is quite generally believed that the lower the value of a fabric per pound the lower is the rate of ad valorem duty required to protect. As a rule the reverse is the fact, because the percentage of conversion cost in the low-grade fabric is greater than in the high-grade.

We believe that a schedule on cloth similar to that hereto attached, in which compound duties about one-half specific and one-half ad valorem are applied to graded values, would assist in preventing undervaluation and be vastly preferable both from a revenue and protective standpoint to a single ad valorem duty:

ON CLOTHS, FLANNELS, FELTS, AND ALL FABRICS MADE WHOLLY OR IN PART OF WOOL NOT SPECIALLY PROVIDED FOR IN THIS SECTION, VALUED AT NOT MORE THAN 20 CENTS PER POUND, THE DUTY SHALL BE 6 CENTS PER POUND AND IN ADDITION THERETO 25 PER CENT AD VALOREM.

More than	\$0.20 not over \$0.25 per lb.	7c. and 25%	
	.21	" " "	equals 58 $\frac{1}{3}$ %
	.25	" " "	" 53
More than	.25 not over .30 per lb.	8c. and 25%	
	.26	" " "	" 55 $\frac{1}{3}$
	.30	" " "	" 51 $\frac{2}{3}$
More than	.30 not over .40 per lb.	11c. and 25%	
	.35	" " "	" 56 $\frac{1}{2}$
	.40	" " "	" 52 $\frac{1}{2}$
More than	.40 not over .50 per lb.	14c. and 25%	
	.45	" " "	" 56
	.50	" " "	" 53
More than	.50 not over .60 per lb.	17c. and 25%	
	.55	" " "	" 56
	.60	" " "	" 53 $\frac{1}{2}$
More than	.60 not over .70 per lb.	20c. and 25%	
	.65	" " "	" 55
	.70	" " "	" 53 $\frac{1}{2}$
More than	.70 not over .80 per lb.	23c. and 25%	
	.75	" " "	" 55
	.80	" " "	" 54
More than	.80 not over .90 per lb.	26c. and 25%	
	.85	" " "	" 55
	.90	" " "	" 54
More than	.90 not over 1.00 per lb.	28c. and 25%	
	.95	" " "	" 55
	1.00	" " "	" 53
More than	1.00 not over 1.25 per lb.	30c. and 30%	
	1.10	" " "	" 57 $\frac{1}{4}$
	1.20	" " "	" 55
	1.25	" " "	" 54
Over	1.25 per lb.	35c. and 30%	
	1.40	" " "	" 55
	1.50	" " "	" 53

REPORT OF THE COMMITTEE ON DRESS GOODS.

The Committee on Dress Goods, as a result of close consideration of this branch of the woollen manufacture, is convinced that the dress goods industry requires for its continuance in this country a rate of tariff duty somewhat higher than is necessary on heavier woollen goods.

It is estimated in the report of the Cloth Committee that the conversion cost—that is, labor, general expense, and fixed charges—is from 30 to 70 per cent of the total cost of cloths, and averages from 45 to 50 per cent. But in certain dress goods, notably cotton-warp fabrics, the conversion cost represents a much greater proportion of the total cost than is the case, on the average, with cloths. This higher proportion of conversion cost to the total cost of such dress goods is due to the relatively small proportion of this total cost that is represented by raw material.

That is, the conversion cost of dress goods being greater in proportion to the total cost than is the case with cloths in general, the dress goods manufacture is on a more distinctively competitive basis even under the present tariff duties—a fact that is readily demonstrated by the importations of these lighter fabrics.

To prove that the present tariff rates on these light-weight dress goods are no more than adequate, the Tariff Board states (Volume I., page 13), "Women's dress goods weighing four ounces or under per yard are still imported in large quantities." Again the Tariff Board (Volume I., page 150) states, "Unlike other paragraphs of Schedule K, the very cheapest dress goods dutiable under these paragraphs show a large importation." Again the Tariff Board (Volume I., page 151) states, "The total value of the imports under the dress goods paragraph is generally higher than on the imports under any other paragraph providing rates on manufactures of wool."

Under the Gorman-Wilson law of 1894-97, which granted free wool and provided a duty of 50 per cent on most of the dress goods imported, the imports of dress goods in 1896 went up to \$19,494,268, foreign valuation. If that was the result under 50 per cent and free wool, the effect of any such rate as 45 per cent with wool dutiable at 20 per cent could not be but disastrous to the dress goods manufacture of America.

Imports of dress goods under existing rates of duty are very large, as shown by the following records of the Department of Commerce and Labor. In order to express the total imports in square yards, it has been arbitrarily assumed by us that the goods weighing over four ounces per square yard average five and one-third ounces to the square yard:

IMPORTS OF DRESS GOODS, ITALIAN CLOTHS, ETC., ENTERED FOR CONSUMPTION FISCAL YEAR ENDING JUNE 30, 1910.

Description.	Rate of Duty.	Unit of Quantity.	Quantity.	Value.	Duty.	Average Value Per Unit.	Average Ad Valorem Rate Duty. Per Cent.
COTTON WARP: Weighing 4 oz. or less per sq. yd. Value not exceeding 15c. per sq. yd. and not above 70c. per lb.	7c. per sq. yd. and 50%	sq. yd.	13,634,478	\$1,776,209	\$1,842,518	\$0.130	103.73
Above 70c. per lb.	7c. per sq. yd. and 55%	"	1,216,903	174,125	180,952	.143	103.92
Above 15c. per sq. yd. and not above 70c. per lb. ...	8c. per sq. yd. and 50%	"	302,382	50,689	49,535	.167	97.72
Above 70c. per lb.	8c. per sq. yd. and 55%	"	5,454,139	1,104,998	1,044,080	.203	94.49
Total per sq. yd.	—	"	20,607,904	\$3,106,021	\$3,117,085	—	—

Weighing over 4 oz. per sq. yd.	33c. per lb. and 50%	lbs.	—	—	—	—
Value not above 40c. per lb.						
Above 40c. and not above 70c. per lb.	44c. per lb. and 50% less 5%	"	26,390	\$16,553	\$18,893	114.14
Above 70c. per lb.	44c. per lb. and 55%	"	1,712	1,950	1,823	93.72
Above 70c. per lb.	44c. per lb. and 55% less 5%	"	178,256	162,851	159,599	98.00
Total per lb.	—	"	206,358	\$181,354	\$180,315	—
Assuming 5½ oz. to the sq. yd., 206,358 lbs. equal	—	sq. yd.	619,074	\$181,354	\$180,315	—
TOTAL COTTON WARP	—	"	21,226,978	\$3,287,375	\$3,297,400	—
ALL WOOL:						
Weighing 4 oz. or less per yd.	11c. per sq. yd. and 50%	"	52,294	\$9,480	\$10,492	110.68
Value not exceeding 70c. per lb.						
Above 70c. per lb.	11c. per sq. yd. and 55%	"	14,550,396	3,220,828	3,371,999	104.69
Total per sq. yd.	—	"	14,602,690	\$3,230,308	\$3,382,491	—

IMPORTS OF DRESS GOODS, ITALIAN CLOTHS, ETC. — *Continued.*

Description.	Rate of Duty.	Unit of Quantity.	Quantity.	Value.	Duty.	Average Value Per Unit.	Average Ad Valorem Rate Duty. Per Cent.
ALL WOOL, <i>Continued.</i>							
Weighing over 4 oz. per sq. yd.							
Value not more than 40c. per lb.	33c. per lb. and 50%	lbs.	234	\$74	\$114	\$0.316	154.35
Above 40c. and not above 70c. per lb.	44c. per lb. and 50%	"	429,233	268,021	322,873	.624	120.47
Above 70c. per lb.	44c. per lb. and 55%	"	2,591,817	2,432,601	2,478,327	.938	101.88
Total per lb.	—	"	3,021,284	\$2,700,696	\$2,801,314	—	—
Assuming $5\frac{1}{2}$ oz. to the sq. yd., 3,021,284 lbs. equal	—	sq. yd.	9,063,852	\$2,700,696	\$2,801,314	—	—
TOTAL ALL WOOL ...	—	"	23,666,542	\$5,931,004	\$6,183,805	—	—
TOTAL DRESS GOODS .	—	"	44,893,520	\$9,218,379	\$9,481,205	—	—
DUTY PAID VALUE...	—	—	—	\$18,639,584	—	—	—

MANUFACTURES OF DRESS AND SIMILAR GOODS CORRESPONDING TO THE
TARIFF CLASSIFICATION OF DRESS GOODS.*(Compiled from Census of 1910.)*

	Square Yards.	Value.
All wool fabrics :		
Woolen dress goods	29,100,000	\$16,385,000
Worsted dress goods.....	105,799,000	54,030,000
	<hr/>	<hr/>
	134,899,000	\$70,415,000
Cotton-warp and union fabrics :		
Union dress goods	4,320,000	\$1,777,000
Woolen filling dress goods.....	13,116,000	\$2,642,000
Worsted filling dress goods	65,113,000	14,799,000
Italian cloths, etc.	29,608,000	9,089,000
	<hr/>	<hr/>
	107,837,000	\$26,530,000
	<hr/>	<hr/>
Total	247,056,000	\$98,722,000

It is manifest from the above tables that in the fiscal year 1910, a year of large domestic production, the imports of dress goods amounted to more than one-sixth of the total quantity of dress goods produced in the United States.

The distinction between cloths and dress goods, due to the proportionately larger conversion cost of the latter fabrics, has been recognized for many years in United States tariff legislation. The Dingley law of 1897 and the Aldrich-Payne law of 1909 contained special paragraphs covering dress goods designed to assure adequate protection, and the proposed bill bearing the name of the present Chairman of the Committee on Ways and Means sets the duty at 40 per cent on cloths and at 45 per cent on the lighter-weight goods that, as the figures of imports show, are on a more markedly competitive basis. Such importations can be attributed only in small part to the demands of fashion or any preference for "exclusive" foreign goods. It will be observed from the statistical statement above that a very great part of the imports consists of dress goods valued at not exceeding 15 cents per square yard — low-priced fabrics of simple construction. These goods are imported not because wealthy and fashionable purchasers require them, but because they are being produced abroad so cheaply by low-wage labor that American mills, even under existing duties, find it very difficult to compete.

The peculiarly competitive character of the dress goods business in this country is frankly and justly acknowledged in the report of the Chairman of the Committee on Ways and Means, in placing his proposed bill before the Sixty-second Congress. The Chairman in his report estimates that the probable imports of dress goods, etc., under the reduced duties which he recommends would be nearly three times the present importations. If this prediction is fulfilled, it will amount to the turning over of practically one-half of the American dress goods market to foreign manufacturers, the crippling or closing of many American mills, and the idleness and distress of thousands of their working-people. We respectfully protest against this as a grave injustice to an industry which, as the facts and figures cited above abundantly prove, is already on a basis of the sharpest competition with the manufacturers of foreign nations.

APPENDIX II.

WAGES IN AMERICA AND EUROPE.

A REPORT OF A COMMITTEE OF THE NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.

A special committee of the National Association of Wool Manufacturers, composed of men who had had personal experience in the manufacture on both sides of the Atlantic or had connections giving them the requisite information, made an investigation in 1911 of comparative wages in American and European woolen mills. The report of the committee as transmitted to the president of the Association was as follows:

WORSTED SPINNING — ENGLISH SYSTEM.

	Hours per Week.	
	American.	English.
	56.	55 1/2.
Overseer of wool-room	\$24.00	\$12.50
Wool-sorters	15.00	9.00
Overseer of wash-room	18.00	7.25
Washers	10.00	6.50
Overseer of card-room	22.50	8.75
Card grinders	11.00	7.50
Card strippers	10.00	6.50
Card feeders	8.00	6.00
Overseer of combing-room	25.00	10.00
Noble combs	8.00	4.50
Gill box minders	7.00	3.25
Backwash minders	8.00	4.50
Overseer of drawing-room	27.00	10.00
Gill boxes	7.00	3.25
Heavy drawing	8.00	3.25
Reducing	7.00	3.12
Roving	7.00	3.12
Overseer of spinning	27.00	11.50
Spinning section overlookers	15.00	9.00
Cap spinning, 2 sides; spindles per side, 100....	6.00	3.00
Cap spinning, 3 sides; spindles per side, 100....	7.00	3.50
Doffers	4.50	2.00
Sweepers	4.00	1.75
Overseer of twisting	20.00	10.50
Twisters	7.50	3.50
Reelers and warpers	7.50	4.25
Winders	6.50	3.00
Mill clerks	15.00	6.00
Engineers	22.00	9.00
Stokers, or firemen	14.00	7.50
Mechanics	15.00	9.00
Carpenters	14.00	8.00
Laborers	9.00	5.00

WORSTED SPINNING — FRENCH SYSTEM.

	Hours per Week.	
	American.	Continental. ¹
	56.	60.
Overseer of wool-room.....	\$24.00	\$11.00
Wool-sorters	15.00	7.00
Overseer of wash-room.....	18.00	7.25
Washers	10.00	5.00
Overseer of card-room.....	20.00	8.50
Card strippers.....	10.00	5.50
Card feeders	8.00	4.00
Overseer of combing-room.....	20.00	10.00
Combs.....	7.00	3.25
Back washers	8.00	3.25
Gill boxes.....	7.00	3.25
Overseer of drawing-room.....	24.00	10.00
Drawing gills.....	7.00	3.50
Drawing frames.....	7.00	3.50
Roving frames	7.00	3.50
Overseer of mule spinning.....	26.00	10.00
Mule spinners.....	15.75	8.00
Mule spinner's helpers	10.00	5.00
Twisters	7.50	3.75
Winders and reelers.....	7.50	3.75
Mill clerks.....	15.00	6.00
Engineers.....	22.00	8.50
Stokers, or firemen	14.00	7.00
Mechanics	15.00	7.00
Carpenters	14.00	6.00
Laborers.....	9.00	4.00

¹ An average of both German and French wages.

WOOLEN SPINNING.

	Hours per Week.	
	American.	Belgian.
	56.	60.
Overseer of wool-room.....	\$18.00	\$8.00
Wool sorters.....	15.00	6.00
Overseer of wash-room.....	18.00	8.00
Washers.....	9.00	4.00
Overseer of card-room.....	18.00	8.00
Carders.....	10.50	5.00
Card cleaners.....	12.00	5.50
Overseer of spinning.....	18.00	8.00
Spinners.....	13.50	6.00
Spinner's helpers.....	9.00	4.00
Mill clerks.....	15.00	6.00
Engineers.....	22.00	7.00
Stokers, or firemen.....	14.00	5.00
Mechanics.....	15.00	6.00
Carpenters.....	14.00	6.00
Laborers.....	9.00	4.00

WEAVING AND FINISHING.

	Hours per Week.		
	American.	English.	Continental. ¹
	56.	55 1/2.	60.
Overseer of weaving.....	\$36.00	\$17.50	\$10.00
Weaving section fixers.....	16.00	9.00	6.50
Weavers.....	13.00	5.00	4.80
Cloth-room burlers.....	7.00	3.85	2.90
Cloth-room sewers.....	10.00	4.50	3.60
Gray-room hands.....	9.50	6.00	5.00
Crabbing, steaming, and singeing....	10.00	6.50	4.45
Washing and scouring.....	9.00	6.50	4.25
Dyeing machine tenders.....	9.60	6.50	4.75
Hydraulic presses.....	14.00	12.50	5.15
Finishing machine tenders.....	9.50	6.50	4.80
Examiners.....	11.00	7.00	5.30
Folding, rolling, or putting up.....	11.50	6.75	4.20
Mill clerks.....	15.00	6.00	6.00
Engineers.....	22.00	9.00	8.50
Stokers, or firemen.....	14.00	7.50	7.00
Mechanics.....	15.00	9.00	7.00
Carpenters.....	14.00	8.00	6.00
Laborers.....	9.00	5.00	4.00

¹ An average of both German and French wages.

APPENDIX III.

SPECIFIC OR AD VALOREM DUTIES.

In Hon. Daniel Manning's Report as Secretary of the Treasury, on the Revision of the Tariff, dated February 16, 1886, Mr. Manning quotes the opinions of his distinguished predecessors as follows:

Secretary Gallatin — 1801 — said:

“Without any view to an increase of revenue, but in order to guard as far as possible against the value of goods being underrated in the invoices, it would be eligible to lay specific duties on all such articles, now paying duties ad valorem, as may be susceptible of that alteration.”

Secretary Crawford — 1818 — submitting to Congress twenty-four amendments, all of which were embodied in the tariff act of 1818, said:

“Whatever may be the reliance which ought to be placed in the efficacy of the foregoing provisions, it is certainly prudent to diminish, as far as practicable, the list of articles paying ad valorem duties. The best examination which circumstances permitted has resulted in the conviction that the following list of articles now paying ad valorem duties may be subjected to specific duties.”

(Mr. Crawford specifies over one hundred articles, the list of which is printed in his report, whereon he advised that the rates be changed from ad valorem to specific.)

Secretary Forward — 1842 — said:

“With a view to guard the revenue against fraudulent undervaluations which cannot be entirely prevented by the existing scheme of ad valorem duties, specific duties are proposed in nearly all cases when practicable. The operation of the system of specific duties may not be perfectly equal in all cases, in respect to the value of the articles included under it. But this inconvenience is more than compensated by the security of the revenue against evasions, and by the tendency of specific duties to exclude worthless and inferior articles, by which purchasers and consumers are often imposed on.”

Hon. John Sherman, Senator from Ohio for many years and Secretary of the Treasury from 1877 to 1881 under President Hayes, said in a speech at Columbus, Ohio, in 1875:

“In every case where the nature of the article will allow, the duty should be specific.”

Secretary Manning adds :

"It will be observed, from the historical review which has been attempted of the tariff legislation of the country from the organization of the government down to the present day, that increasing severity of legislation to prevent custom frauds has come down to us side by side with the raising of the rates of duty and with an enlargement of the application of ad valorem rates. The true inference to be drawn from that fact cannot, I think, fail to appear.

"One advantage, and perhaps the chief advantage, of a specific over an ad valorem system is the fact that, under the former, duties are levied by a positive test, which can be applied by our officers while the merchandise is in the possession of the government, and according to a standard which is altogether national and domestic. That would be partially true of an ad valorem system levied upon 'home value,' but there are constitutional impediments in the way of such a system which appear to be insuperable. But, under an ad valorem system, the facts to which the ad valorem rate is to be applied must be gathered in places many thousand miles away, and under circumstances most unfavorable to the administration of justice.

"One hears it often said that, if our ad valorem rates did not exceed twenty-five or thirty per cent, undervaluation and temptation to undervaluation would disappear, but the records of this Department for the years 1817, 1840, and 1857 do not uphold this conclusion. Of course I am very far from advocating the universal application of specific rates, but I do believe it to be possible for the more experienced and conscientious of our appraising or examining officers in different parts of the country, and for the experts in this Department, to prepare a plan for the prudent enlargement of specific rates which will greatly promote the welfare of the government and of the country."

OPINIONS OF IMPORTERS.

Secretary Manning, in his report, quoted the opinions of American merchants and importers, nearly all earnestly in favor of specific duties. A. G. Jennings & Sons, silk laces, trimmings, etc., New York, said :

"The only remedy is specific duties, at least for all textile fabrics. This is the general opinion of honest importers, as well as that of various manufacturers."

Peter Wright & Sons, earthenware, pig iron, tin plate, salt, etc., Philadelphia, said :

"Frauds upon the revenue, while no doubt much greater upon goods subject to ad valorem duties, are not unknown to goods

subject to specific duties, though in the latter case they require collusion with the weigher."

Codman & Hall, soap, olive oil, Boston, said :

"We believe in having specific duties wherever it is possible, as it is a safeguard against dishonesty."

James A. Hayes & Company, fruits and vegetables, Boston, said :

"Fixed specific rates tend to the bringing of a sounder and better quality of commodities to this country."

Phelps, Dodge & Company, metals, New York, said :

"We are convinced of the great advantage to the government and to the importers of simple specific duties on all metals. They are easily collected and cannot be evaded except by direct fraud in weight."

William F. Reed, silks and cloths, Philadelphia, said :

"An ad valorem rate of duty can hardly be safely levied on products having well-known and clearly established foreign market value; while on goods extending over a wide range of prices, produced by various countries and liable to all shades of quality, it must always offer a premium for fraud, making fairness an impossibility and causing the just to be speedily driven out of the traffic by the unjust."

Marshall Field & Company, dry goods, Chicago, said :

"Our endeavor has been to substitute specific for ad valorem rates, especially on such merchandise as we have suffered injury on because of undervaluation."

Arnold, Constable & Company, dry goods, New York, said :

"In the present tariff the duties are almost entirely of ad valorem rates, and where double duties are collected the ad valorem is so high as to give the foreign manufacturer a large profit in undervaluations. This has driven the honest importer entirely from the market in many articles, such as silks, velvets, and dress goods, compelling him to have his goods delivered here in dollars and cents by the agents of foreign manufacturers."

FORTY-EIGHTH ANNUAL MEETING OF THE ASSOCIATION.

THE tariff outlook occupied much of the time of the forty-eighth annual meeting of the National Association of Wool Manufacturers, which was held on Wednesday, February 5, 1913, at Young's Hotel, Boston. Following a luncheon at one o'clock, Mr. John P. Wood, of Philadelphia, the President of the Association, called the meeting to order, and spoke briefly and informally upon the tariff situation and the hearings of January 27-28 before the Committee on Ways and Means at Washington.

On the motion of Vice-President Clark a resolution heartily commending President Wood and his work was unanimously adopted by the Association, as follows :

Whereas, The attacks upon the whole American woolen manufacturing industry have been vicious, persistent, and formidable during the two years which cover the incumbency of Mr. John P. Wood as President of this Association, and

Whereas, The duties devolving upon the President have been continuous, excessive, and onerous, demanding the almost complete surrender of his time and ability to the service of this Association, and

Whereas, Mr. Wood has with unsurpassed devotion and loyalty given himself freely and fully to this service and has performed it in an intelligent and forceful manner, therefore be it

Resolved, That the National Association of Wool Manufacturers hereby adopt and enter upon the records this minute of their grateful approval and commendation of the work of President John P. Wood and of their purpose to give him their undivided and loyal support in the future as in the past.

In presenting the report of the Nominating Committee, the Chairman, Mr. Maynard, voiced the regret of the Association that Mr. Harding, the senior Vice-President, had declined renomination and reelection, and presented resolutions of gratitude to Mr. Harding, as follows :

Resolved, by the National Association of Wool Manufacturers, That accepting with reluctance the earnestly expressed wish of Mr. Charles

H. Harding, of Philadelphia, to retire this year from the post of senior Vice-President of this Association, we take occasion to record our admiration for the informed and zealous service which Mr. Harding has rendered for many years to the wool manufacture of America — during part of this time as the honored President of the Association and always a most active factor in its important affairs.

Resolved, That the conspicuous ability of Mr. Harding as a writer and speaker, his breadth of view and his constant readiness to champion the larger interests of the industry entitle him to the lasting gratitude of his friends of this Association and of all engaged in the wool manufacture and its allied callings in the United States.

In response Mr. Harding spoke briefly and gracefully, explaining that he believed that the time had come when the veterans should give way to younger men who had proved their merit, and stating that though after nineteen years of service to the Association as President and Vice-President he was withdrawing from active work, his interest would remain unchanged and that it was with deepest regret that he was retiring.

The list of officers of the Association as presented by Chairman Maynard and the Committee on Nominations, consisting besides Mr. Maynard of Messrs. Edwin Farnham Greene, Charles W. Leonard, Thomas Oakes, and James R. MacColl, was as follows :

OFFICERS FOR 1913.

PRESIDENT.

JOHN P. WOOD Philadelphia, Pa

VICE-PRESIDENTS.

WILLIAM M. WOOD Boston, Mass.

FREDERIC S. CLARK No. Billerica, Mass.

GEORGE H. HODGSON Cleveland, Ohio.

SECRETARY AND TREASURER.

WINTHROP L. MARVIN Boston, Mass.

EXECUTIVE COMMITTEE.

ANDREW ADIE	Boston, Mass.
CHESTER A. BRAMAN	New York, N.Y.
FREDERIC C. DUMAINE	Boston, Mass.
WALTER ERBEN	Philadelphia, Pa.
FREDERICK C. FLETCHER	Boston, Mass.
JULIUS FORSTMANN	Passaic, N.J.
HENRY A. FRANCIS	Pittsfield, Mass.
LOUIS B. GOODALL	Sanford, Me
EDWIN FARNHAM GREENE	Boston, Mass.
JOSEPH R. GRUNDY	Philadelphia, Pa.
FRANKLIN W. HOBBS	Boston, Mass.
JOHN HOPEWELL	Boston, Mass.
FERDINAND KUHN	Passaic, N.J.
GEORGE E. KUNHARDT	Lawrence, Mass.
CHARLES W. LEONARD	Boston, Mass.
JAMES R. MACCOLL	Pawtucket, R.I.
WILLIAM MAXWELL	Rockville, Conn.
J. F. MAYNARD	Utica, N.Y.
JOSEPH METCALF	Holyoke, Mass.
THOMAS OAKES	Bloomfield, N.J.
WILLIAM H. SWEATT	Boston, Mass.

It was voted that the Secretary be instructed to cast one ballot for the officers as nominated for the ensuing year. When this had been done President Wood declared the nominees duly elected.

The report of the Treasurer showing an increased income and a substantial balance in the treasury was read and placed on file. The report of the Secretary was read, as follows :

REPORT OF THE SECRETARY.

To the Members of the National Association of Wool Manufacturers :

As required by the By-laws of the Association, the Secretary herewith submits his report for the year ending with the last day of January, 1913.

The year has been more active and prosperous in wool manufacturing than was 1911. A period of reduced production, due to persistent tariff agitation of two years, had so diminished the stocks of goods on hand that large purchases for immediate consumption became necessary, and throughout the latter part of the year particularly, the mills as a whole have been actively and profitably employed, in the face of a second determined attempt at a radical cutting down of the woolen protective duties by Congress. The Underwood wool and woolen bill in the same form in which it had originally been introduced was reintroduced on March 27, 1912, in the House of Representatives. It contained the familiar features of a 20 per cent duty on raw wool, 25 per cent on tops, 30 per cent on yarns, 40 per cent on cloths, 45 per cent on dress goods and 45 per cent on clothing. For this tariff-for-revenue-only measure, protectionist members of the Committee on Ways and Means offered a substitute bill of their own construction, including provisions that practical manufacturers could not but regard as unjust and impracticable.

This substitute was rejected by the House on April 1 and the Underwood bill was for the second time passed and sent over to the Senate, where it was referred to the Committee on Finance. The bill went through the House on a division of 192 to 92 — only one Democrat voting against the bill while twenty Republican "insurgents," nearly all from the West, voted with the Democrats in favor of it. Chairman Underwood, in advocating his bill in the House, virtually rejected the report of the Tariff Board, describing its members as deficient in expert knowledge and experience, and insisting that the method of tariff making long pursued by Congress was preferable to following the guidance of any board.

The Finance Committee on May 23 reported the Underwood bill adversely to the Senate. No action was taken until July 25, when the measure was called up for consideration under an agreement that the bill and all proposed amendments should be disposed of on that day. First a sub-

stitute offered by Senator Cummins of Iowa was rejected on a vote of 14 yeas and 57 nays. The substitute proposed by Senator Penrose of Pennsylvania, chairman of the committee, and described as conforming generally with the recommendations of the Tariff Board, was adopted on a narrow vote of 34 to 32. But at this point Senator La Follette of Wisconsin offered as a substitute his own wool and woolen bill of the previous year. After sharp debate and manœuvering, the La Follette bill was accepted by a vote of 39 to 27, the affirmative strength being made up of the Democratic Senators with ten "insurgent" Republicans.

The La Follette bill provided for a duty of 35 per cent on clothing wools and 10 per cent on carpet wools, 40 per cent on tops, 45 per cent on yarns and 55 per cent on cloths and dress goods. The measure was rejected by the House on July 30 in favor of the original Underwood bill, and on August 1 the Senate asked for a conference. Agreement was quickly reached by the conference committee on the same compromise between the original Underwood and the original La Follette bills which had been arranged a year before and vetoed by the President. The conference report was accepted on August 2 in the House and on August 5 in the Senate. On August 9 President Taft sent in a vigorous veto message, declaring that in the majority of cases the La Follette-Underwood rates were "inadequate to equalize the difference in the cost of manufacture here and abroad." "This is especially true," he added, "of the finest goods involving a high proportion of labor cost. One of the striking developments of the last few years has been the growth in this country of a fine goods industry. The rates provided in this bill, inadequate as they are for most of the cloths produced in this country, would make the continuance here of the manufacture of fine goods an impossibility."

The President attacked also the proposed rates on tops as "even more dangerous," and also the rates on yarns. "They would disrupt, and to no purpose, the existing adjustment, within the industry, of all its different branches." "Most of the rates in the submitted bill," declared the President, "are

so low in themselves that if enacted into law the inevitable result would be irretrievable injury to the wool growing industry, the enforced idleness of much of our wool combing and spinning machinery and of thousands of looms, and the consequent throwing out of employment of thousands of workmen."

The Underwood-La Follette bill was passed over the veto on August 13 by the House of Representatives by a vote of 174 to 80, with ten not voting — 21 "insurgent" Republicans siding with the Democrats. But in the Senate, on August 16, the yeas were 39 and the nays 36, and the bill failed to override the veto, falling far short of the requisite two-thirds majority. Thus for a second time the anti-protectionist assault upon the wool and woollen schedule in the Sixty-second Congress proved unsuccessful.

Early in the past year, when it was seen that another contest over the tariff in Congress was inevitable, the President of this Association appointed special tariff committees on tops and yarns, cloths and dress goods to make a careful study of the rates of duty that would be absolutely necessary for the protection of the various branches of the industry. These special tariff committees worked out a large amount of specific and authoritative information which was held at the disposal of public men and others interested. Later in the year other special tariff committees were appointed to aid the President of the Association in preparing data for the memorial that was presented before the Committee on Ways and Means on January 27. The members of these special committees have held many meetings and have attended most faithfully to their work, and the same thing is true of the Advisory and Executive Committees of the Association.

The memorial to Congress which was offered by President Wood in Washington is now being printed for wide distribution by the Association. Copies will be available in a few days, and it is planned that the first of these shall be sent to the Senators and Representatives in Congress and to woollen manufacturers and merchants throughout the country.

Manufacturers will be asked to examine carefully the memorial, and to indicate their views of its evidence and arguments.

The special Committee on Undervaluations has been continuing its important work. It is believed that frauds upon the revenue, so far as imports of woolen manufactures are concerned, are being gradually reduced to a minimum. The Association has received further additions to its membership within the year, its resources have been strengthened, and it is believed that we have never been better prepared than now to represent the great fundamental interests of the entire industry.

Respectfully submitted,

WINTHROP L. MARVIN,

Secretary.

Boston, February 5, 1913.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, ETC.,

Of Bulletin of the National Association of Wool Manufacturers, published quarterly at 683 Atlantic Avenue, Boston, Mass., required by the Act of August 24, 1912.

Editor, WINTHROP L. MARVIN, 683 Atlantic Avenue, Boston, Mass.

Publisher, National Association of Wool Manufacturers, 683 Atlantic Avenue, Boston, Mass.

Owners, National Association of Wool Manufacturers, 683 Atlantic Avenue, Boston, Mass. (The National Association of Wool Manufacturers is a voluntary association, not a corporation under the law. It has no stockholders, but members regularly elected.)

There are no bonds, mortgages or securities of any other kind.

WINTHROP L. MARVIN,

Editor.

Sworn to and subscribed before me this 12th day of December, 1912.

WILLARD A. CURRIER,

Notary Public.

(*My commission expires May 15, 1914.*)

MR. WHITMAN ON THE WOOL MANUFACTURE.

A SPIRITED DEFENCE OF THE INDUSTRY BY ONE OF ITS VETERANS.

MR. WILLIAM WHITMAN, President of the Arlington Mills and long the President of the National Association of Wool Manufacturers, delivered a noteworthy address at North Adams, Mass., on January 13, before the North Adams Merchants' Association. Mr. Whitman said:

We have just entered upon a new year. Our country is blessed with plenty. Mother Earth, the source of man's sustenance and physical comfort, has yielded abundantly. Nature has done all that could be hoped for to contribute to contentment and happiness. The nation is at peace with all the world. Notwithstanding these blessings our people do not appear to be either contented or happy. The blessing of peace among ourselves — which perhaps is the greatest of all blessings — appears not to be with us. I fear there are many of us almost ready to exclaim with the moody Prince of Denmark: "The time is out of joint; Oh, cursed spite, that I was ever born to set it right."

Two men of my acquaintance met recently. Both had long since passed the meridian of life. One was a retired banker, the other an active merchant. The banker asked the merchant whether in his business life he had ever experienced more uncertain and disturbing conditions than those at present existing. The merchant replied that he had not, and added: "But do not let them trouble you too much; only a short time is left us to bear with them." The answer was only partly true. Age may limit our capacity for work, but it does not lessen our responsibility to do what we can to "restore to rectitude the warped state of things." Age, from the treasure of experience, can contribute to the common good more ripe judgment and a larger charity than youth.

NO NEW COMPLAINT.

I shall not attempt in this short address even to enumerate, much less discuss, the many troubles — whether real or imaginary — that contribute to the unrest and discontent of the day. From what I know of the history of the human race it seems clear to me that the times have always been out of joint and I feel that in the future they will continue to be out of joint. Let me quote the language of Daniel Webster, almost eighty years ago, in describing conditions in Massachusetts and throughout the country in his day :

“There are persons who constantly clamor. They complain of oppression, speculation, and pernicious influence of accumulated wealth. They cry out loudly against all banks and corporations and all means by which small capitalists become united in order to produce important and beneficial results. They carry on mad hostility against all established institutions. They would choke off the fountain of industry and dry all streams. In a country of unbounded liberty they clamor against oppression. In a country of perfect equality they would move heaven and earth against privilege and monopoly. In a country where property is more evenly divided than anywhere else they rend the air shouting agrarian doctrines. In a country where wages of labor are high beyond parallel they would teach the laborer he is but an oppressed slave.”

The same cries are repeated to-day. Unrest appears to be a condition precedent to advancement. It is an element in the process of evolution and the human family is but following in the footsteps of nature. I am sure that the problems of the present are no more difficult of solution than those of the past. From the struggles of men who have lived, better things have come to us. These experiences should teach us that out of present struggles higher good will come. Whatever difficulties now confront us we must meet them as men — with patience, faith, and fortitude.

It appears from the records that in consideration for a grant from the Provincial Government of two hundred acres of land in what was known in 1750 as East Hoosac, Captain

Ephraim Williams agreed to "build a grist and sawmill on the Hoosac River and keep same in repair for twenty years." The city of North Adams is the offspring of that mill and the mills and factories to-day provide the means for your livelihood and are the source of your prosperity. North Adams has thirty-eight manufacturing establishments, with an invested capital of \$13,000,000; \$2,500,000 of wages are paid annually; the industries give employment to five thousand wage-earners and turn out an annual product valued at \$9,000,000.

ATTACKS ON BUSINESS MEN.

Your invitation to be with you to-night has come to me as a representative of one of the units of your industry, and because of this I purpose to address you upon certain phases of the violent and persistent attacks upon the wool manufacturing industry. The greatest of English poets wrote: "While you live tell the truth and shame the devil." I shall obey the spirit of this injunction but disclaim acquaintance with his "Satanic Majesty," and ignorance of any good reason why the truth should shame him. It is not my desire to shame the devil or any of his satellites. I would like to illumine and not put to shame. These assaults have been as varied in character as they have been violent. It seems as if there had been an epidemic of virulence toward the wool manufacture. The attacks have been made not only by open foes but by supposed friends. They have been joined in by the Chief Magistrate of the nation, while openly admitting ignorance; by a president-elect in language that did not require such admission; governors, legislators, Senators, Congressmen, and politicians without regard to party have joined in the attacks. Many of them had their origin in ignorance, hatred, malice, or selfishness. Demagogues have joined in by playing upon the passions of men. The assaults have not been confined to attacks upon the tariff or upon rates of duty. A campaign of personal abuse was inaugurated. Sensational newspapers and magazines have attacked the

character and motives of men identified with the management of the industry. I have borne my share of this abuse and it may relieve the tedium of this address if I appeal to your sense of humor by enumerating a very few of the characterizations of myself:

One of the most prominent men of the country stated that I had his "supreme contempt."

A president of a university declared me to be "one of the woolen lords, the man who made information about 'what I need' so conveniently obtainable for the framers of the Dingley bill."

Another eminent man declared: "The scheme of these infamous duties was conceived by one William Whitman."

The "Springfield Republican" recalled my early boyhood in naming me "the hardiest buccaneer of the Home Market Club."

An authoress in a magazine article stated: "The peculiar superstitions which possess Mr. Whitman produce a blindness and indifference to others." . . . "His obtuseness or indifference runs at times into painful brutality." . . . "Shout tariff revision or pauper labor at him and he scuds to Congress. He is afraid to do business unless an army of tax gatherers are on guard at every port."

The editor of "Harper's Weekly" declared: "It is a cheering sight to see this venerable tax imposer scuttling off before the rising storm."

Possibly the one coming nearer the truth was a statement in a letter recently received, signed "Fair Play," that if I were receiving \$1,000 for my work it was more than I was worth.

SOME FALSE IMPRESSIONS.

It is too commonly believed that the Payne-Aldrich Tariff law very largely increased the duties on woolen goods over those of the previous law, and this belief has prejudiced the uninformed against it. The belief, however, is unwarranted. There was no increase. On the contrary, there was a slight reduction.

It is charged that the protective duty to woolen manufacturers is about 100 per cent. While the duty imposed upon the manufactures of wool that are imported averages over 90 per cent of the foreign price, it is *not true* that the whole of this is a protective duty to the manufacturer. The specific duties which are included in the equivalent ad valorem rate mentioned are about one-half, in many cases more than one-half, of the whole duty and these specific duties are not protective but are compensatory, being imposed to offset the duty on the raw materials used in the manufacture of wool in order that the American manufacturer may be placed upon even terms with his foreign competitor whose raw material is free. The United States is the only great manufacturing country in the world which levies a duty on raw wool. These facts have been stated so often over a long period of years that it seems strange they are so little known and when known so often ignored. Very few men outside of, or even engaged in, the woolen manufacture have a realizing sense of how much the manufacture is handicapped by the duty imposed on its chief raw material—wool. The amount of the duty, however, is only a part of the handicap arising from its imposition. It would not be possible on an occasion like this for me to elaborate the full nature and burden of this handicap, but I will make a simple statement that may be enlightening.

In 1901 a corporation with which I am connected bought South American crossbred wool at 4½ pence (equal to 8.63 cents) landed in Boston. This price was equivalent to 4 pence per pound, or 8.12 cents, at the port of shipment. The duty on this wool was 11 cents per pound, equivalent to 135.46 per cent on the foreign value. These same wools have since advanced in price to about 14 pence landed in Boston. This shows the great fluctuation in value that has taken place and also how much the equivalent ad valorem rate is affected by these changes of price. The specific duty is the same now as it was then, but the increased price of the wool has reduced the ad valorem to 40 per cent from 135.46 per cent. These raw wool duties have not been asked for by

wool manufacturers. On the contrary, if their own interests only were to be considered they would prefer to have wool free. Congress, however, has imposed a duty on the raw wool for the encouragement of sheep husbandry as a national utility and has attempted to compensate the wool manufacturer for these duties. While wool manufacturers would prefer free wool, they have not made demand for it. In this they have been consistent. They contend, however, in addition to the protective duty, for a full compensatory duty, that shall be the equivalent of whatever duty may be imposed on wool.

NOT BENEFICIARIES.

Perhaps the most important charge made against the wool manufacturers is that because of these alleged existing duties they have been beneficiaries of the Government and have acquired great wealth through abnormal profits at the expense of those engaged in other industries. I deny most emphatically the truth of this charge. I assert — and the assertion is capable of absolute proof — that the woollen industry of this country has been less profitable during the last twenty-five years than other industries. Full evidence that the charge is not true has from time to time been presented to the Committees of Congress. As late as February, 1909, in a representative capacity, I presented to the Ways and Means Committee of Congress very complete and carefully prepared statements, with schedules in detail attached, compiled by Frank A. Ruggles, a well-known and responsible statistician of Boston. These were taken from the financial operations and stock market fluctuations for two decades of companies engaged in the cotton and wool manufacture, whose stock had been bought and sold with reasonable frequency in the Boston market during that period. I will give the result of only one of the schedules :

Forty-five companies for twenty years, from 1889 to 1908, averaged 6.67 per cent dividends. Of these, thirty-eight companies engaged in cotton averaged 6.38 per cent. Seven companies, all engaged in wool, or wool and cotton together, averaged 7.08 per cent. There were also presented at the

same time statements of three separate public accountants in reference to the profits on sales. One of three very large representative wool manufacturing corporations showed that after making proper allowance for depreciation the profit was 5.2 per cent on the amount of the sales. Another showed 2.03 per cent on the amount of the sales, and the third 2.06 per cent on the amount of the sales. This is but a small part of the evidence submitted at that time in behalf of the wool manufacturer. I have grave doubts as to whether the evidence was ever read or even wanted by the Committee. It certainly never reached the public, although printed in the Committee's reports. It was not wanted by sensational writers. The fact is that other considerations than the truth were dominant at that time.

A DIFFICULT ART.

The wool manufacture, which suffered an acute depression at the close of the Civil War, received the impetus which has made it one of our great national industries from the tariff of 1866. In all essential features the woolen tariff is the same to-day that it was then. The following year, at the age of twenty-four years, I was elected treasurer of the Arlington Mills Corporation, which was then building a small mill to replace one which had been destroyed by fire a few months earlier. This connection has been continued in different capacities up to the present, with the exception of about six months in 1869. I resigned in June, 1869, and returned in December of the same year. In the meantime the Corporation became practically insolvent, but was rehabilitated by its stockholders contributing new money to the amount of the entire capital stock. This is but one of very many similar experiences. There are only a few left of the men who were at that time actively engaged in the wool manufacturing business. I can recall only five. Therefore the wool manufacturers of to-day are in no way responsible for the policy established by that law. In looking back over these many years I see a path strewn with the wrecks of woolen mills, both large and small—corporations as well as firms and

individuals. I can remember very many of them, but not all. Statistics of such are not accessible in any tabulated or concrete form. The number of them is astounding. At times I wonder that so great a national industry can have been established through so many vicissitudes of fortune.

NO UNDUE RETURNS.

Great fortunes have not been made in the wool manufacture. They are not to be found among those now engaged in it. In calling to mind all the wool manufacturers I have known I cannot remember one of great wealth. There have been some who have amassed what might be called moderate fortunes, but the number is small compared to those who have been unsuccessful. Fortunes are greatly magnified. Every time you add a zero to the right of a number you multiply it ten times, so that a fortune of \$100,000 can be made a million by adding nothing to it, or raised from one million to ten million by adding nothing to it, and that is about the way fortunes are only too commonly estimated. Had the wool manufacture been relatively more profitable than other industries more men would have engaged in it. As a matter of fact, ever since I have been identified with the industry I have found that capital looked with disfavor upon it. It prefers other investments, and banks as a rule prefer to make loans to other industries.

There has never been a monopoly in the wool manufacture. No combination in the nature of a monopoly is possible. There has never been any obstacle, except the exacting nature of the business itself, to prevent any man with sufficient means from engaging in it. The shares of stock of companies engaged in the wool manufacture have never been eagerly sought for. The market for them has been restricted. It is unnecessary to mention the many striking examples in current market prices which demonstrate this fact.

Let us bring this matter right home to this community. The men of Berkshire are as industrious, as prudent and as sagacious as any in this Commonwealth, yet the history of

this neighborhood furnishes a story of disaster and misfortune in the wool business. I know of nothing which should convince an open mind of the injustice of the charge, that through protection wool manufacturers have amassed great fortunes, than the history of the wool industry in this county, and the history of such mills in this county is identical with that in other parts of the State and in other parts of the country. In Berkshire County in the year 1884 there were eighteen woolen mills in operation. From that year until the present time but two additional woolen or worsted mills have been organized. One of these went into bankruptcy in 1909. Of the eighteen mills running in 1884 but four are still under the same managements and seven are now used for other purposes. Of the fourteen which have changed managements all have failed or have been recapitalized or reorganized. Four during that period have been under four different managements, one under three different managements, and five under two different managements.

This brief bit of local history certainly does not indicate any extraordinary opportunity for profits in the business and shows clearly the sharp competition under which the industry has had to be conducted. Where keen competition exists there cannot be excessive profits. The woolen manufacture in this country is on a competitive basis of the keenest nature and in view of the severity of this competition how disastrous would be such low rates of duty as would add to domestic competition that also of foreign goods, made under entirely different economic conditions.

If existing rates of duty are reduced to a point that will admit of increased importations, the benefits to the public are doubtful, but there is no doubt that such increased importations would displace American products and diminish the volume of domestic business. Such conditions could not fail to bring about grave disaster to our Commonwealth.

AN INJUSTICE TO THE WORKERS.

Only those who are engaged in the active conduct of the textile industry can have any conception of the demoralizing

effect upon all the workers therein, without regard to their position or the nature of their work, which is produced by this constant agitation and ever increasing investigation by civic authorities and by self-constituted organizations composed of people actuated by all kinds of motives, yet possessed of neither fitness nor training for industrial investigation. It breeds discontent, dissatisfaction and unhappiness. It is discouraging to good, honest, faithful work and impairs beyond the power of language the efficiency of labor, and by labor I mean to include all kinds. How much better things would be if men were governed by the spirit of the following lines of Jean Ingelow :

“ I am glad to think
I am not bound to make the world go right,
But only to discover and to do,
With cheerful heart, the work that God appoints.”

These remarks, I think, apply with equal force to the present railroad situation in Massachusetts. Managers of all corporate enterprises must expect criticism and it is right and proper they should be subjected to reasonable and fair criticism, but the campaign of abuse may reach such a point that it will not be practicable to secure thoroughly competent men in these varied and responsible positions, who will be willing to subject themselves to abuse for the sake of any compensation that could be offered them.

These assaults upon the woolen industry are calculated not to build up but to destroy, to drive competent men to other employments, to make the business so unprofitable and so unsatisfactory and so disagreeable that the younger generation will have nothing to do with it. In a single night the work of centuries can be destroyed. Disastrous legislation can wipe out an industry in a day as fire in our day destroyed the vast properties of Portland, Boston, Baltimore, Chicago, and San Francisco.

I have spoken of the relative unprofitableness of the woolen industry. This must not, however, be attributed to the tariff. Among the causes of distress in many branches

of the industry have been excessive competition and difficulties inherent to the conduct of its business. Besides, recent years have witnessed a marked epoch in the process of evolution. Many evils consequent upon this evolution have developed. These can be remedied only by harmonious and practically universal coöperation. The wide latitude which the courts have given to the Sherman Anti-Trust law may be a bar in this direction, but I think not. Laws should not be too restrictive.

UNFAVORABLE TO BUSINESS MEN.

It is unfortunate that the future President of our country has so unfavorable an opinion of business men. In an editorial in the Pittsburgh "Gazette-Times" during August, 1912, Mr. Wilson is reported to have said in a speech:

"I do not like to say it, but upon my word I have been impressed sometimes with the very marked difference between American business men whom I have talked with and foreign business men. As compared with many a business man they seem to be veritable provincials, ignorant of the markets of the world, ignorant of the courses and routes of commerce, ignorant of the banking processes even by which goods were exchanged."

In a speech at Seagirt, N.J., August 7, 1912, accepting the Democratic nomination for the presidency, Mr. Wilson said:

"There has been no more demoralizing influence in our politics in our time than the influence of tariff legislation, the influence of the idea that the Government was the grand dispenser of favors, the maker and unmaker of fortunes, and of opportunities such as certain men have sought in order to control the movement of trade and industry throughout the continent. It has made the Government a prize to be captured and parties the means of effecting the capture. It has made the business men of one of the most virile and enterprising nations of the world timid, fretful, full of alarms, has robbed them of self-confidence and manly force, until

they have cried out that they could do nothing without the assistance of the Government at Washington. It has made them feel that their lives depended upon the Ways and Means Committee of the House and the Finance Committee of the Senate (in these later years particularly the Finance Committee of the Senate)."

I dissent from Mr. Wilson's characterization of the American business men and equally so from his opinion in regard to the influence of the tariff upon the character of business men. We woolen manufacturers are characterized as "tariff beneficiaries" and as men who are timid and fretful and cringing for government support. Our industry is classed as a "protected industry" and differentiated from other industries which are classed as "unprotected industries."

PROTECTED AND UNPROTECTED INDUSTRIES.

These errors must be eradicated from the minds of men in high places and their followers before our true relations with the great army of workers and upbuilders of our country can be comprehended and appreciated. We are not tariff beneficiaries; we have never asked and never have been granted special legislation for our interests. We never have been, we are not, we would not be if we could, on the charity list of our country. And as a corollary to this, that woolen manufacturers are favored by legislation above others, whereby they acquire riches, receiving tribute from those engaged in so-called non-protected industries, I assert that the so-called non-protected industries are the only absolutely protected industries in our country. This is by reason of geographical position. I also assert that the so-called protected industries are only partially protected, and because of this capital and labor in the latter are less remunerative than in the former. These fundamental errors of which I am speaking have been so instilled into the public mind by doctrinaires and theoretical economists that they have become altogether too generally accepted as truth. Because they are

vouched for by prominent men they are all the more dangerous.

It has been the policy of our country from its beginning to develop its natural resources. The interdependence of our national industries has been recognized. There have been no limits to the field of our activities other than those created by nature. Any industry in which a unit of labor will produce as much in this country as in a foreign country has been considered worth cultivating. The greatest possible diversity of products has been regarded as beneficial to the nation's welfare. Legislation to accomplish these objects must necessarily have a basic principle. This principle is to impose such duties on certain imported competing products of foreign labor as to prevent their importation at a less price than they could be profitably manufactured for in our own country, under the wages of labor and other economic and social conditions which may prevail.

ASKING ONLY FOR FAIR PLAY.

It has been the policy of our country so to legislate that such industries as can be successfully carried on within our borders shall be transferred from foreign countries to our own country. This policy has resulted in making our country the largest manufacturing nation in the world. Our industry under this policy has kept pace in development with others. It is an essential part of the industrial equipment of the country. We especially deprecate the assaults upon the textile industries. Legislation that would cripple them or make them relatively less prosperous than others would be class legislation for the alleged purpose of favoring the interests of other and absolutely protected industries.

We ask no favors, but we may demand as a right that the woolen industry shall have equal opportunities with all other industries. Those in other industries cannot reasonably expect that those engaged in the woolen industry, only a partially protected industry, should have a special mission to furnish materials for their clothing without reasonable and

proper profits, a profit relative to that secured by other industries, however they may be classed.

Not as men "timid, and fretful, and full of alarms," but as resolute, courageous men who have embarked their fortunes in an honorable and useful industry, we resent the attacks upon American manufacturers and American business and appeal with confidence to the justice and judgment of the American people.

There are clouds overhead, and difficulties and dangers beset us; but injustice works its own cure, and right, not wrong, will ultimately triumph.

ANNUAL CONVENTION OF THE WOOL GROWERS.

THE forty-ninth annual convention of the National Wool Growers Association was held on January 11, 1913, in Cheyenne, Wyoming. Eastern Vice-President A. J. Knollin, of Chicago, presiding in the absence of President Gooding, of Idaho, who found it impossible to attend. Mr. Gooding sent an address which was read to the convention, and cordial resolutions were adopted acknowledging his effective work for the industry.

Vice-President Knollin, in an address "The Right Way," offered some important suggestions for the betterment of the sheep growing business. Mr. Knollin urged that the present marketing system was wrong for both wool and sheep — that there was a strong demand for all the wool and for all the sheep, but that too frequently the markets were overburdened. Grave mistakes were made through improper breeding, no comprehensive system being followed. There should be an effort to localize the breeds of sheep to the environments best suited to them, and then give them painstaking care — especially the products, wool and mutton, when preparing for the market.

There were also addresses on "Coöperation in Range Management," by A. F. Potter, Associate Forester; "Vicissitudes of the Wool Grower," by James E. Poole, of Cheyenne; "The Wool Market," by A. E. Gill, of the Boston Wool Trade Association, and others.

Hon. F. J. Hagenbarth, of Spencer, Idaho, widely known for his ability and information as a leader in the industry, was unanimously elected president of the National Wool Growers Association for the ensuing year. Mr. M. I. Powers, of Flagstaff, Arizona, was elected Western vice-president, and Mr. A. J. Knollin, of Chicago, was again elected Eastern vice-president. The executive committee met after the convention, and appointed Mr. F. D. Miracle, of Montana, treas-

urer, and Dr. S. W. McClure, of Oregon, secretary of the Association. The headquarters of the Association were established permanently at Salt Lake City, Utah.

An earnest protest against free admission of meat products has been sent to the Committee on Ways and Means by President Hagenbarth and Secretary McClure on behalf of the Association.

The resolutions adopted at the wool growers' convention on the subject of the tariff read:

Whereas, The Tariff Board has made a full and complete report as to the difference in the cost of producing wool and the manufactures thereon in the United States and competing countries; therefore

Be it resolved, That we, The National Wool Growers Association, urge the enactment of a law by Congress revising Schedule K, in accordance with this report, imposing a specific duty upon the scoured content of imported wool:

And be it further resolved, That we urge that all forms of manufactures of wool be given that degree of duty needed to equal the difference in cost of production at home and abroad, as shown by the report of the Tariff Board. Also that we recommend the maintenance of a non-partisan tariff commission.

And be it further resolved, That we, The National Wool Growers Association, are opposed to any reduction in the tariff on meat and meat products.

Other resolutions asked for a pure fabric law, opposed the further leasing of unoccupied public lands as provided by bills pending in Congress, requested the enactment of the Mondell bill appropriating \$200,000 for the extermination of predatory wild animals, opposed the further creation of State or Federal game preservations, urged greater care in the preparation of wool for market along the lines prescribed by the National Wool Warehouse & Storage Company of Chicago, commended the work of the Chicago warehouse, and thanked the railroads for their improved livestock service.

President Hagenbarth, in a circular to Western sheepmen, says:

We have before us a year of heavy, important, and expensive work, and must have the support of every woolgrower

if his interest is to be properly defended. President Wilson will call a special session of Congress to meet in March or April, at which time the tariff on wool and mutton is sure to be reduced. In December was sent a fleece of Idaho low quarter blood wool to London to determine the protection we were receiving. This experiment proved the following :

First — The Idaho woolgrower received 45 cents per. scoured pound last year for the same wool in Boston.

Second — The same wool (if there were no tariff) could be landed to Boston from London at $32\frac{1}{2}$ cents per scoured pound. Therefore, the tariff benefited our woolgrower to the extent of $12\frac{1}{2}$ cents per scoured pound or $6\frac{1}{4}$ cents per grease. On certain other wools the protection is some higher. Under the Democratic bill as proposed, this same wool would be admitted by paying 6 cents duty per scoured pound, which would mean a reduction of $6\frac{1}{2}$ cents scoured or $3\frac{1}{4}$ cents per grease pound.

However, we have some relief in sight. If you will properly support the National Woolgrowers Association, we can make a fight before the Senate that will result in saving a considerable degree of protection for wool. We can at least have a provision included in any bill that is passed which will defer its operation until January 1, 1914, thus enabling the woolgrower to market this year's clip under the protection offered by the present law.

Obituary.

STEPHEN SANFORD.

ONE of the greatest carpet manufacturers in the country, Mr. Stephen Sanford, head of the firm of S. Sanford & Sons of Amsterdam, New York, died on February 13, 1913, at the age of eighty-five years. Mr. Sanford was a native of Mayfield, Fulton County, New York, and was educated at Georgetown College and the United States Military Academy at West Point. He became in 1848 a partner with his father in the carpet manufacturing business at Amsterdam, and in 1853 began to conduct the business on his own account. This business grew until it became one of the four chief carpet manufacturing concerns in the country, employing about 4,000 operatives.

Mr. Sanford, shortly after the Civil War, served in the National House of Representatives, as his father had done before him. In 1876 Mr. Sanford was Presidential elector from New York State, casting his vote for General Grant. He was the president of the Amsterdam City National Bank, which he had founded, and a leader in the most important business and philanthropic enterprises of his community. Mr. Sanford held active supervision of his affairs until the last. He leaves one son, John Sanford, now the head of the great business that has long been conducted in the Sanford name.

Editorial and Industrial Miscellany.

THE ASSOCIATION AND CONGRESS.

A FRANK, DEFINITE STATEMENT AS TO HOW FAR TARIFF REVISION CAN SAFELY GO.

IN earlier pages of this Bulletin, there is printed in full the memorial of the National Association of Wool Manufacturers, as presented by President John P. Wood, on January 27 last, before the Committee on Ways and Means in Washington. This was presented, not read, by Mr. Wood. Only fifteen minutes, from 11:15 to 11:30 A.M., was allotted by the committee to the Association for the verbal presentation of its case, and though there was a tentative, conditional promise of more time, it was by no means certain that it would actually be available. Under these circumstances President Wood felt constrained to offer the written brief to Chairman Underwood, and to state that he was desirous, either then or after the committee had had an opportunity of reading the brief, to give any information that might be desired.

The members of the committee proceeded to make direct inquiries of Mr. Wood at considerable length — the questions and answers covering about twenty-four pages of the printed records of the hearings. It so happened that when the first text of the report of the hearings was published, the appendixes containing the reports of the Association committees on tops and yarns, cloths and dress goods, were inadvertently omitted. These are to be included in the permanent record of the hearings, but their omission led to hasty and unfounded assertions in the press that the manufacturers had not made any definite, practical suggestions to the Committee on Ways and Means.

As a matter of fact, the Association committees on tops and yarns and on cloths submitted definite rates of duty in both specific and ad valorem or compound and ad valorem form. These suggested rates applied only to the semi-manufactured or manufactured products, and were described as the rates absolutely necessary to give adequate protection to the American manufacture, in addition to whatever compensatory duties might be required to offset the duty on raw wool.

As to the question of a wool duty, President Wood said :

This Association enters no objection to a duty on wool. If necessary to the continuance and further development of wool growing in this country or for the raising of governmental revenue, we as protectionists approve it. We merely emphasize the fact that neither government nor wool growers can derive any advantage from a duty on wool unless the wool can be used in American mills, and it will be possible to use it in American mills only if the aggregate duty on woollen products includes full compensation for the wool duty and a protective duty adequate to cover fully the higher costs of manufacture.

Since the formal hearings of January, Chairman Underwood has had conferences with President Wood and other manufacturers, and has been given every facility which the Association could supply to secure any supplemental information which he has desired.

Protection and tariff for revenue only are wide apart, irreconcilable principles of legislation. Adherents of the two principles cannot always understand each other; they think and speak and write in different terms, from different standpoints. But the National Association has recognized the sincerity of purpose of Chairman Underwood, his wish to secure the fullest possible information, and his high character and great ability. Nothing which the Committee on Ways and Means desired that could be supplied by the Association has been withheld. The Association is not a political body. It has always included both Republicans and Democrats in its membership. It is not organized or maintained for the purpose of promoting the fortunes of any of the political parties in this country, and it has always respected the obligation upon all loyal citizens to treat with courtesy and frankness the men who for the time being may be entrusted with the government of the United States.

The memorial of the Association, as presented by President Wood, has been printed in large clear type, covering about fifty pages, and has been sent to every Senator and Representative in Congress, to the principal newspapers, and to all of the woollen manufacturers in America, with a special letter calling attention to its main features. All manufacturers, whether members of this Association or not, have been requested to examine the memorial and indicate their opinion of it. The replies thus far

received from woolen manufacturers in all States where the industry is carried on have been unanimous in approval and endorsement. Replies at this writing are still coming in. They will represent doubtless a major portion of all of the woolen machinery of the country, and when they are compiled, a summary of the facts in the case will be transmitted to the law-makers in Washington. The first edition of the memorial has been exhausted, but a supplementary edition has been secured and copies of the memorial are now available for all who may desire them.

The memorial has been commended as a frank and adequate meeting of the issue on the part of the National Association of Wool Manufacturers. The suggested rates of duty on tops, yarns and cloths, if added to the contemplated duties on wool, mark a substantial reduction of the rates long criticised as most excessive, and are unquestionably all that could be recommended in accord with a conscientious belief in the protective tariff system.

AS CANADA VIEWS OUR TARIFF.

COMMENT OF THE CANADIAN TEXTILE JOURNAL ON THE TEXTILE SITUATION IN THE UNITED STATES.

GREAT BRITAIN, France and Germany, our chief manufacturing competitors, are not the only countries where the effort to reduce the American protective tariff is being followed with the liveliest interest. The "Canadian Textile Journal" has this to say of the situation here:

During the past few weeks, the textile manufacturers of the United States have had to face probably the most trying period in their careers. Nine out of ten of them feel that the commanding position occupied by the textile industries of the country has been attained mainly through an avowedly high protective tariff. Two or three years ago, when the present Republican administration came into power they were told that they would have to permit of a revision, but this revision was not of a very downward character and eventually did not amount to very much. Now, on the other hand, they are face to face with something which they recognize not as a mere theory, action in which might be put off indefinitely, but as a condition actually confronting them.

The chairman of the Ways and Means Committee of the House of Congress, Mr. Underwood, before whom the manufac-

turers have been presenting their briefs, the best that a year or more of careful study could produce, has not attempted to blind them to his real purpose. Frankly and avowedly, that purpose is to abolish the protective features of the customs tariff as much as possible and to bring it as closely to a purely revenue basis as possible. His idea seems to be that the lower the duty on any line of goods, the more of those goods will come into the United States, and the greater aggregate amount of duty there will be to collect. Incidentally, the various industries affected are to be brought down to as competitive a foundation as possible, as this, under the Democratic idea, is the only means of reducing the cost of living to the masses.

Starting out against such a basic idea held by the committee conducting the inquiry, it was scarcely likely that the manufacturers could make any great headway. Yet, what was humanly possible, they did do. Take, for instance, the argument presented by the National Association of Wool Manufacturers on behalf of that branch of industry. It was pointed out that the primary purpose of the protective tariff was to induce capital to establish domestic manufactures by providing the opportunity for attractive returns. That competition would develop was foreseen and has been realized, with the result that rates of wages have been progressively raised until they are much in excess of those paid for similar employment in other countries. Competition has also reduced the margin of profit until to-day this margin is probably less than that of any other domestic industries and as small as that of foreign manufacturing countries. Foreign capital has come because the American protective tariff has made it increasingly difficult to sell European goods in this market. As a result the country possesses an industrial equipment capable of supplying its people with the requirements in woolen products, in peace or war, and the realizable benefits of the tariff have been absorbed in the higher wages and higher costs of supplies. To reduce the price of woolen commodities, manufacturers can yield nothing but the factor of profit, which does not average for the efficient establishments in the industry more than 5 to 7 per cent on the value of sales.

The argument that more foreign competition will mean cheaper clothing for the home consumer may be met with what is probably the fact, that quality and price both considered, the average American is the best clothed man in the world. Competition among the domestic manufacturers has brought this about. With a low tariff, doubtless there will be a great augmentation in imports from abroad, but any extra cheapness is quite likely to be obtained at the expense of quality and durability. In this connection it should be remembered that the cost of the cloth which enters into the construction of an ordinary suit is but a small part of the total price charged the consumer by the tailor.

Under a greatly reduced tariff, such as is suggested, cheap cloth would be imported, of generally speaking inferior quality, while the ultimate cost to the wearer would be but slightly affected, as no great quantity of ready-made suits would likely be imported in any case.

The cotton manufacturers went equally into detail in the presentation of their brief, although in their case they admitted that some revision might be satisfactory. The American Cotton Manufacturers' Association reaffirmed its plea for the establishment of a permanent tariff commission. In this connection it referred to a resolution passed at its 1912 convention to the effect that investigation by the Tariff Board and other authorities having showed some instances in which duties on cotton goods are now excessive, owing to changed conditions in manufacturing, the Association now recorded itself in favor of such reasonable revision of the cotton schedule, based upon differences in cost of production and other conditions at home and abroad, as should be consistent with the raising of revenue and the conservation of the home market. Some suggestions were made accordingly along this line.

Manufacturers of knit goods, carpets, jute goods and representatives of several other branches of the textile industries also presented their arguments. The effect these produced remains to be seen, but probably the main battle will be waged in the Senate. It is evident, however, that the industry has to face drastic downward revision of tariff.

AN IMPORTANT CUSTOMS POINT.

THE RIGHT OF AN IMPORTER TO APPEAL AGAINST A LOWER RATE OF DUTY.

In the case of the American Manufacturing Company against the United States, the United States Court of Customs Appeals has rendered a decision of much interest to domestic producers, says the "American Economist," in establishing the principle that an importer has the right of appeal from an incorrect classification and too low rate of duty. Certain bagging, which had been assessed for duty at the rate of six-tenths of one cent per pound was claimed by the importer to be dutiable at a higher rate, either at 10 per cent or at 45 per cent. When the case was tried before the Board of General Appraisers, the attorney for the Government announced that, in view of the small amount involved, the Government would confess judgment. The importer objected to such action, but the board accepted the confession of

judgment. From this action the importer appealed to the Court of Customs Appeals, which held that the importer had a right to be heard in order to make a record, which should serve as a precedent upon which to base future classifications. The Court held that, inasmuch as the importer had presented two alternative claims, the board should have heard the evidence of the importer in order to decide which of the two classifications claimed was the proper one.

About a year ago, the Court of Customs Appeals, in the case of the United States *v.* Schwartz & Co., affirmed the decision of the Board of General Appraisers to the effect that an importer has the right to appeal for a classification carrying a higher rate of duty than that fixed by the classifying officer. In other words, if an importer believes that the rate of duty is too low, he has a right to appeal to the Board of General Appraisers, and from them to the Customs Court of Appeals, and ask that a higher rate of duty be assessed.

This ruling opened the way for domestic producers to make importations of the same class of merchandise upon which they consider too low a rate of duty to be assessed, and to get the matter before the Board of General Appraisers and the Customs Court of Appeals for final adjudication. It has often happened that the Secretary of the Treasury has directed customs officers to adopt a certain classification, and such officers have been bound by his orders. If this classification was too low, the regular importers were not likely to take an appeal against their own apparent interests. In any event, it was formerly considered that they were debarred from doing so.

It has also happened that the Secretary of the Treasury has refused to take an appeal when requested by the domestic interests to do so. But the Schwartz decision permitted the domestic interests to become importers and file appeals without consulting the Secretary of the Treasury. This arrangement did not suit the present Secretary of the Treasury, and by consenting to a confession of judgment, he prevented any record being made as a basis for future classifications. In such cases there would be no evidence taken, and the judgment would simply settle the classification of the merchandise in the particular case on trial.

The case of the American Manufacturing Company removes from the Secretary of the Treasury or from the Board of General Appraisers the power to prevent the adjudication of a question

of classification by a refusal to let the case go to trial on its merits.

ENGLISH WOOLEN WAGES.

A good idea of the wages prevalent in the English wool manufacture can be gathered from a report of Mr. Franklin D. Hale, American Consul at Huddersfield, in the "Daily Consular and Trade Reports" of February 18, 1913. It seems that the Huddersfield and District Woollen Manufacturers and Spinners' Association and the General Union of Weavers and Textile Workers have lately entered into the following agreement in regard to wages:

(1.) The classes of workpeople included in the settlement are men employed as dyers, laborers, millers, scourers, rag shakers, and rag packers.

(2.) Any hours worked in excess of $55\frac{1}{2}$ per week shall be paid for as overtime.

(3.) The wages to be paid for the ordinary hours of work shall be at the rate of $5\frac{1}{2}$ d. (11 cents) per hour for the time worked. For any overtime — that is, hours worked in excess of the $55\frac{1}{2}$ hours per week — there shall be paid wages at the rate of $6\frac{1}{2}$ d. (13 cents) per hour. A corresponding advance shall be given to lads and youths under 21 years of age.

(4.) The rate of wages hereby agreed upon shall be paid for labor as and from January 3, 1913.

(5.) The wages to be paid to workpeople on the night shift shall in all respects be precisely the same as for day labor.

(6.) Any person temporarily employed in any of the classes of employment referred to in paragraph No. 1 shall be paid the above prescribed wages during the term of such employment.

(7.) In the event of any dispute arising in the future as to rates of piecework no stoppage of work shall take place while the rates are under discussion between the employers and the operatives' associations; and in the event of disagreement questions of dispute shall be referred to arbitration, the chairman to be agreed upon between the parties, or, failing agreement, appointed by the (Government) Board of Trade.

(8.) Six months' notice in writing of any proposed alteration in this agreement shall be given and required by either side.

Another agreement between the same associations relates to the price to be paid per piece for pressing in hydraulic presses:

Under 40 yards of 37 inches in length, 5d. (10 cents) per piece: 40 yards of 37 inches and under 50 yards, 6d. (12 cents)

per piece; 50 yards of 37 inches to 67 yards of 36 inches, 7d. (14 cents) per piece; and for every yard of 36 inches above 67 yards, 1 halfpenny (1 cent) per yard extra. It is also provided that in pressing patterns the gross yards pressed per week shall be paid for in accordance with the piece scale.

LAWRENCE AND THE I. W. W.

In a notably strong and just editorial leader, the "Boston Advertiser" has lately had this to say about the labor situation in Lawrence:

Since the conclusion of the trial of Ettor and his colleagues at Salem there is evident (among a clique of vague theorists who imagine themselves reformers, and who have not energy enough to reform their own associations) a disposition to lionize the leaders of that movement known as the "Industrial Workers of the World." Any such movement must necessarily be based upon a dense and unfortunate ignorance of the facts.

We in Massachusetts know something of the "Industrial Workers." We know more about the conditions in the city of Lawrence than those impressionist magazine writers who have spent perhaps two or three hours in the mill city and who have thereon written many pages upon the awful cruelties practised by the mill owners upon their operatives. Among the great body of self-respecting wage-earners in the textile industries of Massachusetts, there is no hesitation in denouncing the socialist organization as impractical, untruthful, lazy, unclean, and demoralizing. There is no romantic glamor over the I. W. W. here, certainly.

It is true that in the city of Lawrence there may be found cases of destitution, of filthy tenement conditions, of squalid poverty, of unhealthy surroundings. But it is significant that many of the tenements where such conditions prevail are owned and run to-day by certain of the gentlemen who are prominent in the circles which the I. W. W. represent. There is an element of foreign population in Lawrence, an element from which the I. W. W. is mainly recruited, and it is among this element that the worst conditions are to be found. They are filthy because they prefer filthiness to the little effort which is involved in being clean. They are squalid because they prefer idleness at odd periods, to steady work. And because they cannot eat their cake and have it too, they believe those socialist leaders who assure them that the fault lies in the "capitalistic system."

Lawrence has no lack of model tenements. The American Woolen Company has built and is building model tenements

which might well be copied in every industrial center outside of Massachusetts. The savings banks of Lawrence can bear very strong testimony to the thrift of those wage-earners who prefer thriftiness to theaters and nightly beer parties. A city of great churches, of well-managed hospitals, dispensaries for the poor, free schools, day and night, vocational training, Lawrence has to offer, to the immigrant who desires to become an American, every possible incentive to self-support, to independence, to education and advancement, amid surroundings above anything possible in the Old World. And the result of all this effort has been a studied conspiracy to riot and anarchy.

The leaders of the I. W. W. have no word of thanks or appreciation for what the mill interests of Lawrence have done for the ignorant, untrained immigrant. Indeed, it may be suspected that some of the leaders would prefer that their docile pupils in lawlessness should never be encouraged in any attempts at self-improvement. The more ignorant the poor dupes are, the more easily will they believe the untruths of demagogues. The less they know, the more eager will they be to follow the lawless courses to which they have been counselled. The more quickly they spend their day's pay, the more easily may they be coaxed into some fresh act of riot or attempted destruction.

There are few cities indeed, outside of Massachusetts where the sense of responsibility for the welfare of the alien immigrant is more strongly kept in active existence than it is in Lawrence. The welfare work, which is already under way or being planned, has been completely ignored by the muckraking sensation-mongers who have "done" Lawrence for the socialist magazines; but it is not ignored by the great body of textile workers in that city or in other cities or towns of that section. In the best sense of the word, in its treatment of the problems of its immigrant population, the city of Lawrence is "progressive" above the average of industrial cities, either in this country or in any other country of the civilized world.

The progressive leaders of social reforms and industrial improvements in Lawrence are far more truly the friends of the wage-earners there than any leader of the I. W. W. has shown himself to be. They are not invited to address gatherings of parlor socialists, it is true; but that is chiefly because they know far better and far more intimately the problems of the wage-earner than the parlor socialists do, or even care to know. The sensation-mongers who are lionizing the professional agitators and demagogues of the I. W. W. merely do so to titivate their cravings for some new emotions. They are doing nothing sensible or practical for the working-man by encouraging the demagogues, but they are bringing some public discredit upon themselves and their associations in the process.

THE YORKSHIRE OBSERVER'S REVIEW OF THE TRADE OF THE BRADFORD DISTRICT IN 1912.

It would be a pleasure to reproduce in full the clear and well considered statements of the conditions and prospects of the several branches of the English wool manufacture found in the Yorkshire Observer's Annual Review of the trade of Bradford. The necessity of reproducing the Memorial of the National Association of Wool Manufacturers, and much of the testimony given the Committee on Ways and Means of the National House of Representatives, on Schedule K, however, makes it impossible.

In consequence we are obliged to be content with brief extracts in which the most salient points in the year's history are presented.

The Review says :

In the Bradford trade, as indeed in the wool industry the world over, the outstanding feature of the year now drawing to a close is the sharp rise in prices, amounting to 15 or 20 per cent, brought about by a prospective shortage in the supply of raw material. Last season Australia gave us a record clip of 2,020,547 bales. For this season, thanks to the drought that prevailed in the Commonwealth from October to June, we are assured that the quantity will be fully 300,000 bales less. There is also to be a shortage in South America and probably in South Africa ; our own clip is deficient, the American domestic clip is deficient, and generally there seems to be a decline in production in all the wool-raising countries of the world. . . .

THE CONDITIONING BUSINESS.

The following table brings together the weight of tops passed through the conditioning-houses in Bradford, Belgium, and the North of France during the eleven months ended November of the past three years (for convenience of comparison kilos have been converted into pounds) :

	1912.	1911.	1910.
Bradford.....	76,865,000	72,150,000	72,305,000
Verviers and Dison	3,055,000	2,577,000	1,977,000
North of France.....	156,174,000	137,882,000	138,206,000
Totals	236,094,000	212,609,000	212,488,000

In Bradford, after two years in which the quantity remained stationary, we have an increase of 11 per cent in the known production of tops. In this connection it matters not at all that the stuff trade is in a poor way and that a smaller quantity of crossbred yarn has been sent to Germany and Russia. The essential fact is that wool is being used in greater quantities than ever before—if not for dress goods, then for coatings; if not for crossbred yarns for export, then for hosiery and woollens. Not only is the wool-consuming population of the world increasing, but at the present time a big consumption is powerfully promoted by the prevailing fashion. Between voiles weighing 8 pounds to 10 pounds per piece on the one hand and coatings ranging from 20 pounds to 40 pounds and gaberdines averaging 35 pounds on the other, the difference from the point of view of consumption is enormous. And when on top of this account is taken of the unparalleled prosperity of the great woolen industry both in Yorkshire and in the South of Scotland, and of the immense quantities of wool used in the hosiery trade—especially in the latest development of it, the knitted coat for women—it is small wonder that prices have jumped as they have at the first hint of diminishing supplies. . . .

BUSINESS CONDITIONS.

The outlook at the beginning of the year was dubious and uncertain. In Lancashire a serious labor dispute was in progress in the cotton trade. Nearly 160,000 weavers were locked out, and 100,000 spinners were on short time. The trouble was not settled until the third week in January, by which time it was computed to have cost six million pounds in loss of trade and nearly another million in wages. This, it was generally considered, was bound to inflict more or less injury on the home market by reducing the purchasing power of such an important section of it as the great industrial population of Lancashire, and an even more disastrous effect was apprehended from the coal strike, which was then looming in the distance. Touching the wool trade still more closely, there had broken out towards the end of 1911 a strike among the warehousemen and transport workers at Buenos Aires, and early in the new year the disaffection spread to the employees of the Argentine railways, with the result that for several weeks no wool could be got down from the interior and stocks at the port warehouses could not be shipped. Fully three-quarters of the Argentine clip remained to be sold, and with the prospect of these pent-up supplies pouring in during March and April on top of the heavy arrivals from New Zealand serious doubt was felt as to the stability of crossbred prices. . . .

THE COAL STRIKE began on March 1, and lasted about five weeks. It was a matter of general wonder how well the trade stood the cutting off of its regular fuel supplies. By reducing

hours and extending the week-end stop reserve stocks were made to go as far as possible, and it was not until the fourth week that mill stoppages became numerous. Spinners and manufacturers were on the whole better able to hold out than combers, with the result that presently a demand began to be felt for tops for quick delivery, and prices appreciated to the extent of about a farthing all round. In consequence of the strike the second series of London Sales, which ought to have opened on March 5, were postponed till April 11, and the subsequent selling dates were rearranged so as to give five series for the year instead of the usual six. . . .

WOOL.

In the wool trade the year has been remarkable in several ways. It has been a wonderfully active year, and probably the turnover has been larger than ever before. Nevertheless the same verdict has to be pronounced upon it as had to be pronounced on 1911, viz., that profits and turnover have not been commensurate. . . .

To MOHAIR belongs the distinction of being the only cheap raw material at the present time. Cape firsts at 11½d. are to-day the same price as Lincoln wethers, the staple with which mohair was wont to be blended in order to cheapen it. It is not suggested that Cape mohair and Lincoln wether tops would be the same price, but it is remarkable that the raw materials should be. As we wrote last year, the production is for the time being larger than the consumption. The current fashion in dress is dead against mohair, and plushes and braids have been having only a poor time. . . .

The total imports of Turkey mohair during the present year have been 54,728 bags. Large stocks exist both here and at Constantinople. As regards quality this year's clip has just been about an average, but it has been noted that the hair tends to get slightly stronger.

CAPE MOHAIR has been cheap in comparison with Turkey and also in relation to its own average of previous years. Indeed, the price has seemed so reasonable that spinners have thought it worth buying speculatively, and the active business that has been done at Port Elizabeth in both the summer and the winter clips has been out of all proportion to the actual consumption. . . .

VAN MOHAIR, in sympathy with Cape, has been at a comparatively handy price, and stocks have moved off fairly well. A slight improvement in the demand and also in the price has been noted during the past month. The difference between whites and colors, usually 2d. a pound, has latterly been reduced to a penny. . . .

IN ALPACA the most notable feature of the year is the large quantity taken by the United States direct from the West Coast,

estimated to be about 8,000 bales. Last year the United States did not take quite half that quantity. The effect of this larger American consumption, combined with a rather smaller total export, has been to raise the price of the article here in spite of a reduced consumption. The total imports of alpaca into this country have been 16,636 bales, a shortage of 8,676 bales as compared with 1911, and at the beginning of the year stocks were not particularly heavy. Although the yarn trade has been poor, spinners have been faced constantly with short supplies of raw material, and latterly they have actually had to choose between losing money on their purchases or letting machinery stand idle. . . .

YARNS.

For us the year has been no record-breaker, though it would be ungrateful to deny that on the whole it has given a very creditable account of itself. It has, however, fallen short of the achievements of its two predecessors.

It will be remembered that a year ago we were just beginning to recover from the effects of a disorganization of business which had been brought about by the collapse of the Russian market and by a singularly ugly cloud on the political horizon, threatening to burst over the friendly relations with our greatest customer. Happily this cloud dispersed, but no sooner had it vanished than other clouds were seen to gather over these isles, namely, the cotton strike and the prospect of a national stoppage of the coal trade. The cotton strike was, fortunately, not of long duration. Staring hard at the bright side of things, we refused to believe in the possibility of a general coal strike, took courage from the very satisfactory employment of our weaving sheds at home and the confident bearing of our big brother wool, and looked hopefully towards Brother Jonathan, who showed symptoms of renewed prosperity and seemed in an enterprising mood. Our faith in the soundness of the home trade and the strength of wool has not been disappointed. It is owing to these three factors, with wool as their leader, that a slump was prevented in February on the approach of the coal strike and at any of the several periods of slackness experienced in the export demand.

In drawing this general outline, we are thinking more particularly of the large class of spinners of twofold worsted yarns. Botany spinners, who do the bulk of their trade at home, have been in a rather stronger position all through the year, and mohair and alpaca spinners form a class for themselves. . . .

Coating yarns have enjoyed a great demand, especially in the home trade; carpet yarns have gone as strongly as ever, but are now rather too dear, and the moquette or furniture-covering trade has consumed heavy weights of twofold 16's, twofold 32's, and kindred counts. Crewels did a fairly normal trade. Ordi-

nary braid yarns moved within a rather narrow compass, but genappes expanded very materially, one of the causes being the discovery that the hobble skirt now in vogue was all the better for an edging of genappe braid. But the first prize in this year's race fell undoubtedly to Botany and hosiery yarns. The former do not bulk largely in the export trade, Continental spinners practically monopolizing this line in their own countries and competing successfully with British products in other markets of the world. But England, thanks to the growing prosperity of her working classes and her colonies, is herself her best customer for Botany yarns — and a very excellent one, too. In addition to coatings, it is gaberdines which accounted for the increase in the consumption of Botanies. Botany yarns of 48's to 60's counts have gained about 4½d. to 6d. per pound since the beginning of the year. . . .

Casting a glance into the probable future we see no reason for misgivings if peace between Turkey and the opposing allies is concluded at an early date and no complications arise in the final reckoning up. The waste of war will have to be made good by us, directly or indirectly, and by our Continental customers and competitors. At home, in the colonies, in America, and elsewhere things look bright enough, and even buoyant, though there is an element of doubt about the outcome of the tariff legislation in America due next spring. Wool prices seem able to hold their own, and it is more than likely that they will add to their strength once the political atmosphere is cleared and business resumes a normal course. . . .

PIECES.

In the piece trade the year has been singularly uneventful. With few exceptions manufacturers have prospered. Many new looms have been started, and more would have been put in were it not for the fact that there is a marked scarcity of weavers. This is clearly a problem that will have to be grappled with before long unless it is considered that the manufacturing industry in Bradford has reached its full stature and further expansion is undesirable. We are very near the limit of possible expansion under present conditions, and the next thing must be either more weavers or automatic looms. Invention has a long way to go yet before the automatic loom becomes a practicable proposition in the Bradford trade, and as for increasing the number of weavers, it has been pointed out recently that this is not so much a question of higher wages as of improving the conditions of work in the mills. . . .

The bulk of a big trade has been done on lines so few and simple as coatings, coating serges, gaberdines, and Paramattas. Even the stuff trade, what there has been of it, has been essentially a plain trade. Diagonals, whipcords and corkscrews mark the limit of excursions into fancy weaves, and they are not

fancies in the sense in which the term is generally understood. Moreover, they have not sold particularly well, though in some quarters hopes are entertained of a bigger trade in them next year. Variety has been sought chiefly in colorings, which for next spring are to be of a daring brightness. A great advance has been made in Bradford in the dyeing of bright shades, thanks largely to the introduction of new dyewares and partly also to the improvement of dyeing methods. The colors obtainable on wool are now almost as fast as those obtained on cotton.

The two most noteworthy features in relation to the Bradford trade to-day are the increasing production of broad fabrics at the expense of narrow and the rapid development of the making-up trade. The call for greater width has brought much good to the machinery makers, for the narrow looms that formerly constituted the chief part of the equipment of Bradford mills have been scrapped by the score, to be replaced by new ones of the ampler reed space the requirements of the trade now demand. It is not only in coatings that this tendency asserts itself. Even dress goods now must be of the width found most economical to the maker-up, who will not tolerate waste, but makes his patterns and cuts up his cloth with as much precision as an engineer calculates the minimum size of the girders required to carry a given load. In the home trade the maker-up is now the all-important customer. The dress trade done by drapers over the counter is a mere fraction of its former dimensions. The turnover of Bradford merchants and manufacturers in London has dropped enormously, and their trade is now done with Leeds and Manchester principally and numerous smaller provincial towns, for the maker-up tends to desert the big industrial centers and establish himself where female labor is plentiful and cheap.

The expansion of the gaberdine trade this year has been enormous. They are made both for men's and women's wear, but by far the larger increase has been made in the men's wear trade. The demand is still large, and another excellent year is in prospect. Considering what has been done in gaberdines it is not a little surprising that the Paramatta trade for rubber proofing should also have been good, but the fact has to be recorded that it is bigger than ever. Cravenetted goods have also had a remarkably successful run. Wool and union linings of all descriptions, including Beatrices, Victorias and Italians, have quite maintained the large output of last year, but alpaca and mohair linings have not gone so well. The white warp trade, which includes all goods made with cotton warp and luster or Botany weft to be dyed in solid colors, has not been as good as in 1911. It is largely a South American trade, and business with the Argentine has been poor, besides which the South American peoples as they get richer are coming to take fabrics of a more expensive type.

Coating manufacturers have done quite as well as last year.

A falling off in the export trade has been fully made up in the home market, and but for the check of the coal strike last year's production would probably have been exceeded handsomely. Recently the advance in prices has had a tendency to reduce sales. The yarns used became more varied as regards counts and qualities, and colorings were never more diverse than they have been this year. . . .

WOOLENS.

The year which is just drawing to a close will stand out prominently in the history of the woollen trade as a period of exceptional activity. Most years have their quiet and slack times, but 1912 has been an exception, as the demand has been steady and continuous, and the output must have reached a record. The mills have worked at the highest pitch of pressure, and frequently night and day shifts have been necessary, and yet manufacturers have been unable to keep abreast of the demand, as throughout the year complaints have been general concerning delay in delivery. Fashion has been in favor of woollen fabrics. Fancy tweeds for men's wear have enjoyed a wonderful run of popularity, which is not yet on the wane. . . .

Manufacturers fully admit the wonderfully large output, but complain that the margin of profit has been small owing to continuously increasing cost of production. Although during the year they have more than once advanced their price lists, it is stated that the increase does not equal the greater cost of manufacturing. Producers at the present time are not anxious to accept large contracts, as the high water mark in raw material does not seem to have been reached. It must certainly be admitted that the margin of profit is not as great as it was in the earlier days of the industry, but the year's output has been unprecedented. A satisfactory feature of the year's trading has been the almost complete absence of financial difficulties. No embarrassment of any moment has to be recorded, and the amount to be written off on the score of bad debts is trivial.

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READY-MADE.

There has been an extraordinary demand for winter suits and overcoats, and the most pronounced feature of the trade has been the distinct revival in the Ulster and Munster styles of double breasted overcoats. Only a very few years ago it was thought that these heavy and clumsy garments had gone out with the Victorian era never to come in again, and their place seemed to have been permanently taken by light-weight rain-proof garments. The motor-car seems responsible for the revival, and it certainly is a powerful factor in the style of men's wearing apparel. The revival of the heavy styles is all to the good of

the clothing trade, and is also beneficial to the woollen manufacturers, who are called on to supply the clothiers' requirements, and the long double breasted styles consume large quantities of material. . . .

The great center of the cloth trade is Batley, but there are some large mills at Dewsbury and others in Birstall and Ossett engaged in the same industry. In all those towns the general tendency is towards a higher and more varied class of trade. . . .

THE EXPORT BUSINESS.

The cloth trade has been steady. Large orders have been comparatively few, but there has been a constant flow of business, which has been well distributed over the home markets, the colonies, and foreign countries. As a natural sequence to full and regular employment in the United Kingdom, the home trade has been fully maintained, and this is particularly gratifying in view of the fact that high food prices cut in to the margin to be spent on clothing, and that the scanty garments now fashionable for ladies' wear have sensibly reduced the quantity of materials required for each dress.

The exports of cloth continue to grow at a satisfactory rate. Trade with the Continent and the Far East is mainly done through London agents, and as this applies to a more limited extent to trade with our colonies and dependencies the exact destination of a considerable proportion of the goods is not known by the producers. There is no doubt, however, that the heavy woollen district enjoys a large share of the business done with all parts of the world, and that the wonderfully cheap and serviceable cloths manufactured in the district surmount even the highest tariff walls erected against them. A fair amount of trade continues to be done with Japan, and it is opening out with China in a very promising manner. Canada has become one of the best customers, the expansion of trade with the Dominion in recent years being remarkable, and very large shipments are made to Australia, South Africa and South America. In Europe the greatest trade is with Germany, France, Belgium and the Netherlands, in the order named.

THE WOOLEN INDUSTRY OF LEEDS.

In a recent report Consul Benjamin F. Chase makes the following interesting statements of the conditions of the woollen trade in Leeds during the year 1912:

Leeds experienced a record year in almost all lines of industry in 1912. The only serious drawback was the coal strike in March,

which compelled some plants to close on account of lack of fuel or supplies. Workmen were well employed, except those in the building trades, many of whom emigrated to the British colonies or the United States. Keener competition, both local and general, higher wages, greater cost of material, and increased charges resulting from the operation of the national insurance act all combined to lower the margin of profit, although production was larger than usual.

The manufacturers of Leeds are hampered by transportation charges and the city has not shown as continuous growth as have other towns more favorably located. It has extended its area to include some near-by towns, but there are many vacant houses, stores and offices, even in what appear to be the most desirable locations. A large training school for teachers was completed and formally opened during 1912; the university has been enlarged; the curriculum of technical schools has been extended to cover many lines of training not usual in such institutions; the health of the city has been better than heretofore; but one does not hear of many firms extending their works.

ACTIVITY IN THE TEXTILE TRADE.

The woolen and textile trade was generally busy in 1912. Mills ran full time and many in the nearby towns worked overtime. The manufacturers of yarns fear a change in fashion or a slump in business, and have, therefore, hesitated to increase their mill capacity, preferring to work their spinning machines overtime in order to keep the looms running. The mills are generally making a larger variety and better quality of goods than formerly. The Near Eastern market is closed at present, but Japan, China, South America and the British dominions absorb the output. Canada is reported as one of the biggest buyers, with a rapidly growing trade. In Europe the best trade is with Germany, France, Belgium and the Netherlands. The largest exports of shoddies go to Germany, while France and Belgium take the best qualities. Few of the textile products of this district go to the United States, but plans are being made for heavy exports in case the tariff is reduced. The textile exports from Leeds to the United States were less than in 1911.

The demand for reversible blanket cloth, raised tweeds and all other cloths with a blanket finish for ladies' wear was large. The better qualities of sporting tweeds and golf-suit materials were in great request. Worsted coatings of the better sort and fancy tweeds were much in demand. Grays were most desired, except for South America and the Continent, where more striking colors and designs were wanted. Fancy worsteds, blue serges, covert coatings, Scotch and Yorkshire tweeds are among the cloths which had a ready sale.

GROWTH OF THE READY-MADE CLOTHING INDUSTRY.

The ready-made clothing industry is growing in importance in Leeds. The special-measure departments get a good trade from the tailors of the district and turn out all classes of suits and overcoats. The ordinary tailor has trouble in finding good workmen, as these artisans are following the shoemakers into the factories, where they find more congenial surroundings and more regular employment. The styles of the ready-made suits produced are not equal to the American product, but are being improved. The trade with the United States is small; heavy overcoats, ladies' mantles, suits, and tweed hats and caps to the value of about \$4,500 having been declared at this consulate in 1912. The general export trade in ready-mades is large, but there is no way of determining the value of the exports from this district, as they do not go through any particular port. Leeds possibly stands second to London in this line.

Many of the clothing factories in Leeds obtain their power from the city's electric department, and when the coal strike in the spring of 1912 made it impossible to supply them with power, the smaller factories closed down and the larger ones reduced their forces. It was not until midsummer that conditions became normal, but after that business boomed and the output exceeded that of former years. Either the cold weather or the use of automobiles caused the heavy double-breasted Ulster and Munster styles of overcoats to be chiefly in demand. These took more material than the previous styles, thus helping the cloth manufacturer. Rain-proofed cloth remained popular. In suitings, tweeds and serges led in popularity.

SMALLER IMPORTS OF AMERICAN RAGS.

The decline in the imports of American rags into Batley and Dewsbury, the rag centers of the world, has caused considerable newspaper comment recently. American rags were first imported in large quantities in 1908, following the high prices of 1907, when the market had only local and European supplies to draw on. The British railways encouraged the importation of the American product by reducing their storage charge, so that it was safe to ship rags to this market and hold them in storage for a profitable price. Increased trade in other lines caused the railways to return to their former rates, the ocean freight rate was increased, and the prices on the American market improved, so that during the first eleven months of 1912 there was a decrease of 6,200 tons in the imports from the United States. Representatives of American rag firms have been in this field for some time, but only one remained at the close of 1912, and he expected to return to the United States as soon as he could dispose of his stock. Cartage charges were increased from 36 cents to 42 cents a ton on January 1, 1913.

The following table gives the price per hundred-weight (112 pounds) for American rags in December, 1911 and 1912 :

Classes.	December, 1911.	December, 1912.
Dark cloth.....	\$2.00	\$2.18
Brown and black cloth	2.73	2.79
Blue cloth.....	2.73	2.67
Tan cloth.....	8.00	8.84
Light cloth.....	3.16	3.52
Black worsted.....	5.71	6.31
Blue worsted.....	5.11	5.47
Dark worsted.....	3.40	4.25
Light worsted	5.59	6.56
Black serges.....	5.11	5.59
Blue serges.....	5.11	5.59
Dark serges.....	3.04	3.16
Brown and green serges.....	5.83	6.31
Fine dark flannels	4.98	5.83
Fine colored thibets	9.08	8.60
Wool bodies	1.76	2 06

CENTENARY OF THE RAG TRADE.

The present year (1913) is the centenary of the introduction of the rag trade into Batley, the birthplace and home of shoddy. The first two rag machines used in its production were started in an outhouse and propelled by a water wheel. The trade has grown to large proportions, but has remained purely local. A shoddy mill in the United Kingdom outside a radius of ten miles from Batley is a rarity.

One journal says of the rag trade :

“The conversion of new and old rags into shoddy and mungo is now one of the principal side industries in the manufacture of cloth. It is quite a respectable industry and, what is more, many who are not aware of the fact have in times past worn garments containing a considerable portion of the substance, and are doing so to-day. Very little cloth is now manufactured in which shoddy has not been introduced; as an instance, in addition to the cheaper materials, the meltons, beavers and whitneys made up into uniforms, greatcoats, etc., imitation Harris and Donegal tweeds, very often contain a proportion of shoddy.”

THE TEXTILE INDUSTRY OF ROUBAIX.

(Consul Joseph E. Haren in Consular and Trade Reports.)

THE feature which distinguishes the textile industry of this district from that of other important textile centers is the wide variety of products. The raw materials handled include wool, cotton, silk, flax and jute, all of which undergo the processes necessary to convert them into the finished product.

At the beginning of the year there were 267 mills in operation in Roubaix, giving employment to 60,000 men and women, with an annual expenditure for wages of approximately \$16,000,000. Wool combing gives employment to about 10,000 hands, with an annual wage of \$1,600,000. The output comes to 88,000,000 pounds of tops per year. About 410,000 spindles and 4,500 workmen are engaged in spinning combed yarns, while for carded yarns the figures are 85,000 spindles and 2,500 workmen. The annual wages for these two industries are about \$1,000,000 and \$600,000 respectively. The several cotton-spinning mills have 438,000 spindles, which handle 54,000 bales of raw cotton, giving employment to 7,000, with a wage of \$2,000,000.

Roubaix looms produce woolen and cotton dress goods, vestings, flannels, sateens, velvets, carpets, upholstery goods and felt. In weaving 35,000 looms are engaged, 23,000 being for dress goods and the cloth trade, 9,000 in the velvet trade (cotton and linen), and 3,000 in the upholstery trade; 25,000 workmen are employed at a wage of about \$6,500,000. The value of the output amounts to \$40,000,000 annually.

The dyeing industry employs 10,000, with a wage of \$2,000,000. About 250,000,000 yards of cloth are handled during the year. The combing industry, which at all times is the most prosperous in the district, continued normal during 1911. The production equaled that of 1910, and such wool as was not used locally in the manufacture of dress goods was used in the manufacture of hosiery.

The following table gives the quantities of textile materials which passed through the conditioning houses of this district in 1911:

Conditioning Houses.	Wool.		Yarns.	Cotton.	Silk.
	Combed.	Waste.			
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
Roubaix	89,510,788	4,668,279	16,299,162	12,010,976	103,624
Tourcoing	51,374,371	29,457,764	18,721,802	9,162,217	10,074
Fournies	4,451,744	591,250	9,738,115	51,269	7,819
Le Cateau.....	169,081	.....	2,030,422	67,795	2,067
Total	145,505,984	34,717,293	46,789,501	21,292,257	123,584

The export trade in tops showed an increase of 2,220,000 pounds during 1911, the figures for the year being 61,000,000 pounds. The spinning of combed wool was in a far less satisfactory condition than the combing industry, the export trade remaining stationary and the local consumption having diminished. The carded-wool situation was also unsatisfactory and attempts to find new markets met with disappointment.

DRESS-GOODS TRADE.

The weaving of women's dress goods, in which Roubaix specializes, was even more affected in 1911 than in 1910. No less than 35 per cent of the 15,000 looms specially devoted to this product were idle. In the lining and skirting trade the situation was worse. England, one of Roubaix's best customers, purchased only what was strictly necessary. This decrease is attributed to the prevailing fashions, the favor shown velvets and silks, and the increased cost of living. Declared exports to the United States showed a reduction from \$1,109,065 in 1910 to \$359,959 in 1911. Cloth looms (making men's suiting goods) and upholstery looms were fairly well employed. The dyeing and finishing industry was necessarily affected by the condition of the dress-goods trade. Throughout the year workmen were necessarily idle two days a week.

COÖPERATIVE RELIEF AND FRATERNAL SOCIETIES.

The increase in the cost of living and forced stoppage of looms caused "Le Caisse de Chomage" (municipally controlled short-time fund) to come to the aid of workmen. During 1911, 7,350 were helped, while in 1910 less than 3,000 received assistance.

To counteract the increasing competition with Roubaix goods in foreign markets, several important manufacturers in this city in July, 1910, formed a company known as the *Comptoir Francais d'Exportation*. Its operations include the discounting of long-dated bills, insurance of commercial risk, the grouping together of non-competing firms for the maintenance abroad of salesmen, organization of export bounties, the establishment in foreign countries of permanent commercial agencies, and the sending out of special commercial missions. In the first year of its existence the turnover of this institution amounted to more than \$300,000.

102 NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.

COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF WOOL AND MANUFACTURES OF WOOL FOR THE TWELVE MONTHS ENDING DECEMBER 31, 1911 AND 1912.

GROSS IMPORTS.

ARTICLES AND COUNTRIES.	Quantities for Twelve Months ending December 31.		Values for Twelve Months ending December 31.	
	1911.	1912.	1911.	1912.
WOOL, HAIR OF THE CAMEL, GOAT, ALPACA, AND OTHER LIKE ANIMALS, AND MANUFACTURES OF:				
UNMANUFACTURED—				
Class 1—Clothing (durable)—				
Imported from—	<i>Pounds.</i>	<i>Pounds.</i>		
Belgium	41,891	286,111	\$9,077	\$65,702
United Kingdom	17,603,867	43,922,344	4,052,306	9,872,667
Argentina	13,333,235	26,179,666	2,547,748	4,652,800
Uruguay	561,360	3,216,262	120,740	636,911
Australia and Tasmania	9,201,119	13,937,065	2,409,963	3,394,683
Other countries	2,111,030	3,753,763	476,237	783,169
Total	42,852,502	91,297,211	\$9,616,071	\$19,405,932
Class 2—Combing (durable)—				
Imported from—				
Turkey in Europe	1,303,366	536,986	\$463,479	\$147,646
United Kingdom	6,996,628	17,762,991	1,739,228	4,241,744
Canada	173,726	735,400	43,747	168,912
South America	2,642,262	2,242,468	593,477	566,678
Other countries	137,876	448,589	31,996	97,139
Total	11,253,858	21,727,434	\$2,871,927	\$5,222,119
Class 3—Carpet (durable)—				
Imported from—				
Russian Empire	17,417,899	30,338,666	\$2,376,894	\$4,152,475
United Kingdom	20,373,538	29,088,517	3,044,600	4,817,296
Other Europe	11,674,993	15,798,592	1,503,009	2,358,495
Argentina	4,356,162	4,060,216	526,316	476,762
China	35,799,956	28,428,327	3,946,299	3,402,011
East Indies	3,030,598	5,574,882	348,581	680,732
Turkey in Asia	8,322,360	8,699,552	1,161,591	1,301,103
Other countries	840,644	3,104,953	84,134	393,452
Total	101,816,150	125,093,705	\$12,991,424	\$17,582,326
Total unmanufactured	155,922,510	238,118,350	\$25,479,422	\$42,210,377
MANUFACTURES OF—				
Carpets and carpeting (durable)—	<i>Sq. Yards.</i>	<i>Sq. Yards.</i>		
Imported from—				
Turkey in Europe	302,219	316,182	\$1,615,943	\$1,703,157
United Kingdom	142,450	133,167	424,772	504,361
Asia	394,558	484,797	1,513,272	2,036,773
Other countries	68,905	69,323	318,263	443,570
Total	907,932	1,003,469	\$3,874,250	\$4,688,061

COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF WOOL, Etc.

GROSS IMPORTS. — *Continued.*

ARTICLES AND COUNTRIES.	Quantities for Twelve Months ending December 31.		Values for Twelve Months ending December 31.	
	1911.	1912.	1911.	1912.
	<i>Pounds.</i>	<i>Pounds.</i>		
CLOTHS—(dutiabie)—				
Imported from—				
Belgium	472,303	537,994	\$530,762	\$600,319
Germany	736,517	846,887	744,354	844,490
United Kingdom	2,725,351	2,627,239	3,150,396	3,047,062
Other countries	218,974	297,146	267,114	402,130
Total	4,153,145	4,309,266	\$4,692,626	\$4,894,001
DRESS GOODS, WOMEN'S AND CHILDREN'S—(dutiabie)—	<i>Sq. Yards.</i>	<i>Sq. Yards.</i>		
Imported from—				
France	5,923,544	3,081,732	\$1,341,593	\$726,578
Germany	2,927,971	1,833,478	709,850	462,578
United Kingdom	12,557,764	9,736,640	2,424,486	1,853,246
Other countries	107,245	136,178	26,335	42,503
Total	21,516,524	14,788,028	\$4,502,264	\$3,084,905
Clothing, ready-made, and other wearing apparel (dutiabie)			\$2,186,195	\$2,253,895
All other (dutiabie)			\$962,498	\$920,851
Total manufactures of			\$16,217,833	\$15,841,713

COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF
WOOL, ETC. — *Concluded.*

EXPORTS OF WOOL AND MANUFACTURES OF.

FOREIGN.				
ARTICLES.	1911.	1912.	1911.	1912.
	Quantities.	Quantities.	Values.	Values.
WOOL, HAIR OF THE CAMEL, GOAT, ALPACA, AND OTHER LIKE ANIMALS, AND MANUFACTURES OF:				
UNMANUFACTURED—				
Class 1—Clothing (dutiable) lbs .	3,002,334	1,359,236	\$702,471	\$243,383
Class 2—Combing “ “ .	175,756	12,120	41,669	2,725
Class 3—Carpet “ “ .	332,625	444,900	39,095	62,884
Total unmanufactured	3,510,715	1,816,256	\$783,235	\$298,992
MANUFACTURES OF—				
Carpets and carpetings, sq. yds., dutiable	3,768	4,453	\$15,089	\$36,820
Cloths, pounds, dutiable	28,235	36,938	25,943	32,846
Dress goods, women's and chil- dren's, sq. yds., dutiable . . .	242,151	241,008	45,148	42,685
Wearing apparel, dutiable . . .			11,671	13,405
All other, dutiable			42,609	12,351
Total manufactures of			\$140,460	\$138,107
DOMESTIC.				
WOOL, AND MANUFACTURES OF:				
Wearing apparel			\$1,636,719	\$2,193,846
All other			834,214	1,315,964
Total manufactures			\$2,470,933	\$3,509,810

WOOL REMAINING IN BONDED WAREHOUSE DECEMBER 31,
1911 AND 1912.

ARTICLES.	1911.	1912.	1911.	1912.
	Quantities.	Quantities.	Values.	Values.
WOOL, HAIR OF THE CAMEL, GOAT, ALPACA, AND OTHER LIKE ANIMALS, AND MANUFACTURES OF:				
UNMANUFACTURED —				
Class 1 — Clothing, lbs.	21,391,350	29,424,421	\$5,372,718	\$6,828,378
Class 2 — Combing, lbs.	2,924,330	4,646,682	744,516	1,087,130
Class 3 — Carpets, lbs.	17,689,175	21,595,523	3,388,510	3,573,079
Total unmanufactured, lbs. . .	42,004,855	55,666,626	\$9,505,744	\$11,488,587
REMAINING AT —				
Boston and Charlestown, Mass. . .	20,308,011	30,685,960	\$4,588,360	\$6,489,101
New York, N.Y.	11,217,783	11,000,806	2,814,524	2,183,494
Philadelphia, Pa.	5,987,367	7,060,078	1,102,710	1,233,327
Springfield, Mass.	2,479,458	3,417,225	617,261	893,600
Other districts	2,012,235	3,502,557	382,889	689,065
MANUFACTURES OF —				
Carpets and carpeting, sq. yds. . .	222,361	292,125	\$658,497	\$594,357
Cloths, lbs.	801,567	750,763	890,268	841,220
Dress goods, women's and children's, sq. yds.	6,586,345	5,942,203	620,035	1,192,307
Wearing apparel			215,658	234,703
All other			438,605	440,962
Total manufactures of			\$2,822,063	\$3,303,549

QUARTERLY REPORT OF THE BOSTON WOOL MARKET FOR OCTOBER, NOVEMBER AND DECEMBER, 1912.

DOMESTIC WOOLS. (GEORGE W. BENEDICT.)

	1912.			1911.
	October.	November.	December.	December.
OHIO, PENNSYLVANIA, AND WEST VIRGINIA.				
(WASHED.)				
XX and above	31 @ 32	31 @ 32	31 @ 32	30 @ 31
X	29 @ 30	29 @ 30	29 @ 30	29 @ 30
1/2 Blood	37 @ 38	37 @ 38	37 @ 38	34 @ 35
1/2 "	37 @ 38	37 @ 38	37 @ 38	33 @ 34
1/2 "	37 @ 38	37 @ 38	37 @ 38	32 @ 33
Fine Delaine	34 @ 34 1/2	34 @ 34 1/2	34 @ 34 1/2	33 @ 34
(UNWASHED.)				
Fine	23 @ 24	23 @ 24	23 @ 24	22 @ 23
1/2 Blood	29 @ 30	29 @ 30	29 @ 30	29 @ 30
1/2 "	30 @ 31	30 @ 31	30 @ 31	28 @ 29
1/2 "	30 @ 31	30 @ 31	30 @ 31	27 @ 28
Fine Delaine	28 @ 29	28 @ 28 1/2	28 @ 28 1/2	26 @ 27
MICHIGAN, WISCONSIN, NEW YORK, ETC.				
(WASHED.)				
Fine	36 @ 37	36 @ 37	36 @ 37	32 @ 33
1/2 Blood	36 @ 37	36 @ 37	36 @ 37	32 @ 33
1/2 "	36 @ 37	36 @ 37	36 @ 37	31 @ 32
Fine Delaine	33 @ 34	33 @ 33 1/2	33 @ 33 1/2	32 @ 33
(UNWASHED.)				
Fine	22 @ 23	22 @ 23	22 @ 23	20 @ 21
1/2 Blood	28 @ 29	28 @ 29	28 @ 29	28 @ 29
1/2 "	29 @ 30	29 @ 30	29 @ 30	27 @ 28
1/2 "	29 @ 30	29 @ 30	29 @ 30	26 @ 27
Fine Delaine	26 @ 27	26 @ 26 1/2	26 @ 26 1/2	25 @ 26
KENTUCKY AND INDIANA.				
(UNWASHED.)				
1/2 Blood	31 @ 32	31 @ 32	31 @ 32	28 @ 29
1/2 "	31 @ 32	31 @ 32	31 @ 32	27 @ 28
Braid	26 @ 27	26 @ 27	26 @ 27	22 @ 23
MISSOURI, IOWA, AND ILLINOIS.				
(UNWASHED.)				
1/2 Blood	29 @ 30	29 @ 29 1/2	29 @ 29 1/2	27 @ 28
1/2 "	29 @ 30	29 @ 30	29 @ 29 1/2	25 @ 26
Braid	26 @ 27	26 @ 27	26 @ 27	22 @ 23
TEXAS.				
(SCOURD BASIS.)				
12 months, fine, and fine medium . .	60 @ 62	60 @ 62	60 @ 62	58 @ 60
6 to 8 months, fine	53 @ 55	53 @ 55	53 @ 55	52 @ 54
12 months, medium	53 @ 55	53 @ 55	53 @ 55	52 @ 54
6 to 8 months, medium	47 @ 50	47 @ 50	47 @ 50	47 @ 48
Fall, fine and fine medium	48 @ 50	48 @ 50	48 @ 50	48 @ 50
" medium	43 @ 45	43 @ 45	43 @ 45	42 @ 43
CALIFORNIA.				
(SCOURD BASIS.)				
Free, 12 months	53 @ 55	52 @ 54	52 @ 54	55 @ 56
" 6 to 8 months	47 @ 48	46 @ 47	46 @ 47	51 @ 52
Fall, free	45 @ 46	45 @ 46	45 @ 46	44 @ 45
" defective	38 @ 42	38 @ 42	38 @ 42	35 @ 38
TERRITORY WOOL: Montana, Wyoming, Utah, Idaho, Oregon, etc.				
(SCOURD BASIS.)				
Staple, fine and fine medium	67 @ 68	66 @ 67	66 @ 67	62 @ 63
" medium	62 @ 64	61 @ 63	61 @ 63	58 @ 59
Clothing, fine and fine medium . . .	60 @ 62	60 @ 61	60 @ 61	55 @ 57
" medium	57 @ 58	57 @ 58	57 @ 58	50 @ 51
NEW MEXICO. (Spring.)				
(SCOURD BASIS.)				
No. 1	58 @ 60	57 @ 58	57 @ 58	55 @ 57
No. 2	52 @ 54	51 @ 53	51 @ 53	46 @ 47
No. 3	45 @ 47	45 @ 46	45 @ 46	36 @ 37
No. 4	43 @ 45	42 @ 44	42 @ 44	34 @ 35
NEW MEXICO. (Fall.)				
(SCOURD BASIS.)				
No. 1				
No. 2				
No. 3				
No. 4				
GEORGIA AND SOUTHERN.				
Unwashed	28 @ 30	28 @ 30	28 @ 30	24 @ 25

DOMESTIC WOOL.

BOSTON, December 31, 1912.

The market during the last quarter of the year has not been as active as the preceding one and yet there has been a normal amount of wool sold and values have remained steady. The November elections rather checked any tendency towards higher prices, which would undoubtedly have prevailed if the Republicans had been continued in power. On the other hand, the rapid liquidation which many manufacturers predicted would follow Democratic success has not materialized.

The goods market continues very satisfactory and all available machinery is fully employed; consequently the consumption of wool is large and in view of the fact that stocks are unusually small, we think values during the next two or three months are likely to hold fairly steady.

Medium wools are decidedly scarce and fine and fine medium grades are about the only ones in which there is any selection to be had.

GEORGE W. BENEDICT.

PULLED WOOLS. (*Scoured basis.*) (W. A. BLANCHARD.)

	1912.			1911.
	Oct.	Nov.	Dec.	Dec.
Extra, and Fine A	58 $\frac{a}{g}$ 63	58 $\frac{a}{g}$ 62	57 $\frac{a}{g}$ 62	48 $\frac{a}{g}$ 54
A Super	55 $\frac{a}{g}$ 57	54 $\frac{a}{g}$ 56	53 $\frac{a}{g}$ 55	46 $\frac{a}{g}$ 48
B Super	50 $\frac{a}{g}$ 54	50 $\frac{a}{g}$ 53	48 $\frac{a}{g}$ 53	42 $\frac{a}{g}$ 46
C Super	40 $\frac{a}{g}$ 43	39 $\frac{a}{g}$ 42	38 $\frac{a}{g}$ 42	35 $\frac{a}{g}$ 38
Fine Combing	57 $\frac{a}{g}$ 60	57 $\frac{a}{g}$ 60	57 $\frac{a}{g}$ 60	50 $\frac{a}{g}$ 53
Medium Combing	52 $\frac{a}{g}$ 55	52 $\frac{a}{g}$ 55	52 $\frac{a}{g}$ 55	45 $\frac{a}{g}$ 47
Low Combing	47 $\frac{a}{g}$ 50	48 $\frac{a}{g}$ 50	48 $\frac{a}{g}$ 50	40 $\frac{a}{g}$ 43
California Extra	56 $\frac{a}{g}$ 60	55 $\frac{a}{g}$ 58	55 $\frac{a}{g}$ 58	48 $\frac{a}{g}$ 52

PULLED WOOLS.

Through the month of October demand was steadily good, and this condition prevailed in spite of the fact that the result of the national election was generally conceded to the Democrats. Phenomenal activity in the goods market and a depleted stock of raw material offset the prospect of economic change.

Soon after election business fell off, and wools accumulated in pullers' hands. Stocks were further increased by heavier killing of sheep at slaughtering centers. Flock-masters in many instances took this means of reducing their flocks in preference to wintering them, in this way hoping to realize better prices for their sheep than might be obtained under adverse tariff legislation.

December was notably dull and manufacturers settled down to the policy of buying only to fill immediate orders. Previous confidence in the strength of values consequent upon light stocks of wool weakened, slight concessions in prices were frequently made, and the year closed with a growing feeling of uncertainty.

W. A. BLANCHARD.

108 NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.

FOREIGN WOOLS. (MAUGER & AVERY.)

	1912.			1911.
	Oct.	Nov.	Dec.	Dec.
Australian Combing:				
Choice	41 @ 44	42 @ 45	42 @ 45	40 @ 41
Good	40 @ 41	40 @ 41	40 @ 41	37 @ 38
Average	36 @ 38	37 @ 39	37 @ 39	32 @ 35
Australian Clothing:				
Choice	42 @ 44	43 @ 45	43 @ 45	42 @ 43
Good	40 @ 41	41 @ 42	41 @ 42	37 @ 40
Average	38 @ 39	39 @ 40	39 @ 40	34 @ 36
Sydney and Queensland:				
Good Clothing	42 @ 45	42 @ 45	42 @ 45	40 @ 42
Good Combing	40 @ 43	40 @ 43	40 @ 43	37 @ 40
Australian Crossbred:				
Choice	40 @ 43	40 @ 43	40 @ 43	40 @ 41
Average	35 @ 38	35 @ 38	35 @ 38	33 @ 36
Australian Lambs:				
Choice	42 @ 45	42 @ 45	42 @ 45	42 @ 45
Good	39 @ 40	39 @ 40	39 @ 40	39 @ 40
Good Defective	37 @ 38	37 @ 38	37 @ 38	36 @ 37
Cape of Good Hope:				
Choice	34 @ 36	34 @ 36	34 @ 36	34 @ 36
Average	30 @ 33	30 @ 33	30 @ 33	32 @ 33
Montevideo:				
Choice	35 @ 37	36 @ 38	36 @ 38	34 @ 35
Average	32 @ 34	33 @ 35	33 @ 35	32 @ 33
Crossbred, Choice	35 @ 38	36 @ 39	36 @ 39	34 @ 35
English Wools:				
Sussex Fleece	41 @ 42	42 @ 43	42 @ 43	40 @ 41
Shropshire Hogs	40 @ 41	41 @ 42	41 @ 42	39 @ 40
Yorkshire Hogs	36 @ 38	37 @ 39	37 @ 39	35 @ 36
Irish Selected Fleece	38 @ 39	39 @ 40	39 @ 40	34 @ 35
Carpet Wools:				
Scotch Highland, White	23 @ 25	23 @ 25	23 @ 25	23 @ 24
East India, 1st White Joria	31 @ 33	32 @ 35	32 @ 35	29 @ 31
East India, White Kandahar	27 @ 28	28 @ 30	28 @ 30	26 @ 28
Donskoi, Washed, White	35 @ 36	35 @ 36	35 @ 36	33 @ 34
Aleppo, White	35 @ 36	35 @ 36	35 @ 36	32 @ 33
China Ball, White	25 @ 27	26 @ 28	26 @ 28	23 @ 25
" " No. 1, Open	23 @ 25	24 @ 26	24 @ 26	21 @ 23
" " No. 2, Open	18 @ 19	19 @ 20	19 @ 20	14 @ 16

FOREIGN WOOLS.

Foreign wools during the last quarter of the year, with the exception of Lincoln wools, and to some extent of 40s Australian and South American, were not in active request. The lower grades above mentioned, especially of Buenos Ayres wools, were freely taken, some of them to arrive, at a fair advance over cost. The first wools sold in South America were the lowest cost, and this fact favored the sales here.

There was a moderate inquiry for choice fine clothing Australian and but little inquiry for combing descriptions. The foreign markets were very strong, with advancing tendency, and the finer qualities of Australian wool were obtainable here at less than importing cost, with duty; but the lack of demand for fine Delaine wools reduced values to a figure that was ten to fifteen cents scoured less than foreign wools could be imported for.

Values of English wools abroad were almost prohibitive. Carpet wools, both combing and filling, were in strong demand and comparatively light supply. It would seem as if the supply of these wools were growing smaller each year.

MAUGER & AVERY.

BOSTON, JANUARY 1, 1913.

BULLETIN

OF THE

National Association of Wool Manufacturers

A QUARTERLY MAGAZINE

DEVOTED TO THE INTERESTS OF THE NATIONAL WOOL INDUSTRY.

VOL. XLIII.]

BOSTON, JUNE, 1913.

[No. II.

A RADICAL REVISION DOWNWARD.

THE WOOLEN SCHEDULE OF THE UNDERWOOD BILL A GRAVE
MENACE TO THE INDUSTRY.

IN the Underwood tariff bill, the American people for the first time since 1846 and 1857 stand face to face with the traditional Southern Democratic idea of a tariff for revenue only. The Gorman-Wilson law of 1894, which characterized and destroyed the second Administration of President Cleveland, was so much higher in its general average of rates as to be almost a protectionist measure by the side of the extreme legislation which the majority party in Congress now contemplates. President Wilson in his economic training and inheritance is essentially a Southern man, and other Southern men dominate the Committee on Ways and Means that has framed the new tariff bill. These gentlemen have not acted with any conscious hostility to the great national industries of the old, wealthy, and populous Northeastern States. They believe in all sincerity that their bill will benefit the country as a whole — and yet time will swiftly and relentlessly demonstrate now, as it did in 1894–1897, that these well-intentioned but ill-informed Southern gentlemen are terribly mistaken.

NOT DISCRIMINATED AGAINST.

There is no reason for woollen manufacturers to feel that their own industry has been singled out for any particularly

severe treatment. The rate of 35 per cent proposed in the House bill for all kinds of woolen cloths and dress goods marks a radical, dangerous reduction, but it is in substantial accord with the proposed rates on general manufactures. Undoubtedly the authors of the bill consider their provision for free raw wool as an important boon and safeguard to the wool manufacturing business of America. But we shall most certainly fail of a demonstration of how valuable this supposed benefaction of free wool really is. The rates provided on yarns and fabrics are so extremely low that even with free wool the manufacturing industry will inevitably receive a staggering blow.

Some parts of the industry will suffer more gravely than others, but the entire industry will be disorganized by the unfair and excessive pressure of a foreign competition whose wages and labor costs are from one-half to one-fourth of our own. There can be no full and constant volume of production, so essential to the best economy and efficiency of any industry. Europe will occupy parts of the American market for woolen fabrics and demoralize all of it, and in the face of such conditions free wool will be a negligible factor.

The fundamental principle of any satisfactory woolen schedule is that it shall give American mills a fair, living chance to operate their machinery. This the Underwood woolen schedule does not do and, therefore, with all due regard for any kindly purpose of the authors of the Underwood measure, the free wool paragraph is not worth the paper it is written on.

WORSE THAN THE GORMAN-WILSON LAW.

The Gorman-Wilson woolen schedule of 1894-1897 gave the manufacturers free wool and a duty of 40 per cent on goods valued at not over fifty cents a pound and of 50 per cent on goods of greater value—the larger part of the imports fell into the latter class. This duty of 50 per cent proved inadequate to maintain the prosperity of American woolen mills in 1894-1897. Of course the industry has been greatly strengthened under the adequate rates of suc-

ceeding tariff laws, but the wage increase of 30 or 40 per cent in our woolen mills since 1897 has had nothing like a parallel in the mills of England, our principal competitor.

Rates of from 50 to 60 per cent on cloths and dress goods, with special provision for very light or high cost fabrics, might now suffice to equalize conditions in a general way between America and Europe. But no such rates are granted. The framers of the Underwood bill, grown far more insistent and extreme than the authors of the Gorman-Wilson law, have recklessly slashed the woolen duties to 35 per cent, creating an outlook certainly as bad for all and probably worse for portions of the industry than that of 1894.

PROMPT REMONSTRANCE MADE.

The woolen schedule of the Underwood bill has been met by the officers of this Association with a prompt and emphatic remonstrance. In his memorial to the Committee on Ways and Means on January 27, 1913, President John P. Wood stated that "the manufacture of wool from its raw state to finished fabrics would have been utterly ruined by the enactment of either the House bill in its original form, the Senate substitute or the compromise bill agreed upon in conference, which was finally passed by Congress"—the bill twice vetoed by President Taft. On May 9, 1913, after the new Underwood bill had passed the House of Representatives, the officers of the Association addressed a protest to the Committee on Finance against the bill, declaring that its enactment "would be a menace not only to the prosperity but to the existence of the woolen manufacture in the United States."

In furtherance of this protest, the Secretary of the Association appeared against the bill at the first hearing granted on May 21, 1913, by the Senate sub-Committee appointed by the Chairman of the Committee on Finance to consider the woolen schedule. The Secretary requested at that time that an interval of six months be granted between the taking effect of free wool or reduced wool duties and the taking

effect of the reduced duties on goods, in order that American manufacturers might properly adjust their business to the new conditions.

BRIEFS FILED WITH THE SENATE COMMITTEE.

A written brief stating the argument for such an interval was submitted to the sub-Committee at the same time. Other briefs have also been presented, asking for an amendment to the schedule that would prevent the free importation of broken tops; urging that the duty on woolen hosiery be made to equal the duty on cotton hosiery; suggesting that alpaca, a material not produced in the United States, be put on the free list, and setting forth the very serious injury that resulted to the American wool manufacture under the Gorman-Wilson law, simultaneously with a condition of high prosperity in the woolen mills of England.

Copies of these protests and briefs were sent not only to the members of the sub-Committee but to all the members of the Committee on Finance, and subsequently to all the other members of the Senate. The difference of attitude and of conviction between North and South, between believers in tariff for revenue and protection and believers in tariff for revenue only, may prove to be so deep and irreconcilable that all our argument and remonstrance will not avail. But the arguments have been made, the protests have been entered, with all due respect, with profound sincerity and with the utmost emphasis. The National Association of Wool Manufacturers has honestly sought to present the best possible defence of the great industry whose interests have for nearly fifty years been intrusted to its keeping, and all that now remains is to await the issue of political events at Washington.

WINTHROP L. MARVIN.

THE NEW TARIFF IN HOUSE AND SENATE.

FREE WOOL AND A 35 PER CENT DUTY ON CLOTHS AND DRESS GOODS PROVIDED IN THE HOUSE SCHEDULE.

IN THE HOUSE.

THE special session of the Sixty-third Congress called by President Wilson for the express purpose of revising and reducing the tariff in accord with the Democratic idea of tariff for revenue only opened in Washington on Monday, April 7, 1913. Promptly on that day Hon. Oscar W. Underwood, Chairman of the Committee on Ways and Means, introduced into the House the tariff bill on which he and the majority of his Committee had been working. The woolen schedule of the new Underwood bill contained a most important change from the bills which President Taft had vetoed in 1911 and 1912. In those earlier measures raw wool was subject to a duty of 20 per cent ad valorem. It is an open secret that the Ways and Means Committee was preparing to embody in the new Underwood woolen schedule a duty of 15 per cent on raw wool.

But suddenly on the insistence of President Wilson himself, who desired both free wool and free sugar, wool was put upon the free list just before the bill was introduced, and the necessary changes were made in the duties on tops, yarns, cloths, dress goods, clothing, etc. In the original Underwood bills, tops had been dutiable at 25, yarns at 30, cloths at 40, and dress goods at 45 per cent. In the new bill, with wool and wool wastes on the free list, the rate on tops was made 15 per cent, on yarns 20 per cent, and on cloths, dress goods and clothing alike, 35 per cent.

This change, like the immediate reduction of 25 per cent on raw sugar and its free listing three years hence, was accepted as the direct demand of the new administration. Chairman Underwood subsequently stated that free wool and free sugar were the two distinctive features desired by President Wilson in the new tariff measure. The tariff bill as

originally introduced bore the number H.R. 10 and was referred, of course, to the Committee on Ways and Means. The measure was carefully considered in a caucus of Democratic Representatives. Few changes were ordered in the bill by the caucus and no change in the woolen schedule. Northern members of Congress from industrial States made an earnest effort in the caucus to have the taking effect of the new duties on manufactures deferred until some months after free wool had become operative. An attempt was also made to restore to the free list alizarin and other chemicals and dye-stuff materials which the Underwood bill had unexpectedly made dutiable. But although these Northern men fought hard for these amendments, they were overborne by Representatives from the South and West.

On Tuesday, April 8, President Wilson appeared before both the Senate and the House of Representatives in the hall of the House and delivered a special message to Congress urging that there be an immediate and vigorous revision and reduction of the tariff. "We must," he said, "quite abolish everything that bears even the semblance of privilege or any kinds of artificial advantage, and put our business men and producers under the stimulation of a constant necessity to be efficient, economical, and enterprising, masters of competitive supremacy, better workers and merchants than any in the world." "It would be unwise to move toward this end headlong, with reckless haste, or with strokes that cut at the very roots of what has grown up amongst us by long process and at our own invitation. It does not alter a thing to upset it and break it and deprive it of a chance to change. It destroys it."

On Tuesday, April 22, the revised and approved Underwood bill bearing the number H.R. 3321 was reported back to the House by Chairman Underwood, read a first and a second time and with the accompanying majority and minority reports referred to the Committee of the Whole House on the state of the Union and ordered to be printed.

The House woolen schedule is as follows :

SCHEDULE K — WOOL AND MANUFACTURES OF.

295. Combed wool or tops and roving or roping made wholly or in part of wool or camel's hair, and on other wool and hair which have been advanced in any manner or by any process of manufacture beyond the washed or scoured condition, not specially provided for in this section, 15 per centum ad valorem.

296. Yarns made wholly or in chief value of wool, 20 per centum ad valorem.

297. Cloths, knit fabrics, felts not woven, and all manufactures of every description made, by any process, wholly or in chief value of wool, not specially provided for in this section, 35 per centum ad valorem.

298. Blankets and flannels, composed wholly or in chief value of wool, 25 per centum ad valorem; flannels composed wholly or in chief value of wool, valued at above 50 cents per pound, 35 per centum ad valorem.

299. Women's and children's dress goods, coat linings, Italian cloths, bunting, and goods of similar description and character, composed wholly or in chief value of wool, and not specially provided for in this section, 35 per centum ad valorem.

300. Clothing, ready made, and articles of wearing apparel of every description, including shawls whether knitted or woven, and knitted articles of every description made up or manufactured wholly or in part, and not specially provided for in this section, composed wholly or in chief value of wool, 35 per centum ad valorem.

301. Webbing, suspenders, braces, bandings, beltings, bindings, cords, cords and tassels, and ribbons; any of the foregoing made of wool or of which wool or wool and india rubber are the component materials of chief value, 35 per centum ad valorem.

302. Aubusson, Axminster, moquette, and chenille carpets, figured or plain, and all carpets or carpeting of like character or description, 35 per centum ad valorem.

303. Saxony, Wilton, and Tournay velvet carpets, figured or plain, and all carpets or carpeting of like character or description, 30 per centum ad valorem.

304. Brussels carpets, figured or plain, and all carpets or carpeting of like character or description, 25 per centum ad valorem.

305. Velvet and tapestry velvet carpets, figured or plain,

printed on the warp or otherwise, and all carpets or carpeting of like character or description, 30 per centum ad valorem.

306. Tapestry Brussels carpets, figured or plain, and all carpets or carpeting of like character or description, printed on the warp or otherwise, 20 per centum ad valorem.

307. Treble ingrain, three-ply, and all-chain Venetian carpets, 20 per centum ad valorem.

308. Wool Dutch and two-ply ingrain carpets, 20 per centum ad valorem.

309. Carpets of every description, woven whole for rooms, and Oriental, Berlin, Aubusson, Axminster, and similar rugs, 50 per centum ad valorem.

310. Druggets and bookings, printed, colored, or otherwise, 20 per centum ad valorem.

311. Carpets and carpeting of wool, flax, or cotton, or composed in part of any of them, not specially provided for in this section, and on mats, matting, and rugs of cotton, 20 per centum ad valorem.

312. Mats, rugs for floors, screens, covers, hassocks, bed-sides, art squares, and other portions of carpets or carpeting, made wholly or in part of wool, and not specially provided for in this section, shall be subjected to the rate of duty herein imposed on carpets or carpeting of like character or description.

313. Whenever in this section the word "wool" is used in connection with a manufactured article of which it is a component material, it shall be held to include wool or hair of the sheep, camel, or other like animals, whether manufactured by the woolen, worsted, felt, or any other process.

314. Hair of the Angora goat, alpaca, and other like animals, and all hair on the skin of such animals, 20 per centum ad valorem.

315. Tops made from the hair of the Angora goat, alpaca, and other like animals, 25 per centum ad valorem.

316. Yarns made of the hair of the Angora goat, alpaca, and other like animals, 30 per centum ad valorem.

317. Cloth and all manufactures of every description made of the hair of the Angora goat, alpaca, and other like animals, not specially provided for in this section, 40 per centum ad valorem.

318. Plushes, velvets, and all other pile fabrics, cut or uncut, woven or knit, whether or not the pile covers the entire surface, made wholly or partly of the hair of the Angora goat, alpaca, and other like animals, and articles made wholly or in chief value of such plushes or velvets, 50 per centum ad valorem.

Paragraph 397 provides that where two or more rates of duty may be applicable, the highest rate shall be levied, and also explains the meaning of the words "component material of chief value." The paragraph follows:

397. That each and every imported article, not enumerated in this section, which is similar, either in material, quality, texture, or the use to which it may be applied, to any article enumerated in this section as chargeable with duty, shall pay the same rate of duty which is levied on the enumerated article which it most resembles in any of the particulars before mentioned; and if any nonenumerated article equally resembles two or more enumerated articles on which different rates of duty are chargeable, there shall be levied on such nonenumerated article the same rate of duty as is chargeable on the article which it resembles paying the highest rate of duty; and on articles not enumerated, manufactured of two or more materials, the duty shall be assessed at the highest rate at which the same would be chargeable if composed wholly of the component material thereof of chief value; and the words "component material of chief value," wherever used in this section, shall be held to mean that component material which shall exceed in value any other single component material of the article; and the value of each component material shall be determined by the ascertained value of such material in its condition as found in the article. If two or more rates of duty shall be applicable to any imported article, it shall pay duty at the highest of such rates.

FREE LIST.

653. Wool of the sheep, hair of the camel, and other like animals, and all wools and hair on the skin of such animals.

654. Wool wastes: All noils, top waste, card waste, slubbing waste, roving waste, ring waste, yarn waste, bur waste, thread waste, garnetted waste, shoddies, mungo, flocks, wool extract, carbonized wool, carbonized noils, and all other wastes not specially provided for in this section.

The views of the Republican minority were presented by Hon. Sereno E. Payne and the views of the Progressive minority by Hon. Victor Murdock.

CHAIRMAN UNDERWOOD'S REPORT.

Chairman Underwood in his report accompanying the bill set forth the view that the protective tariff policy had not been in any way the choice of the American people since the Civil War but was "the result of peculiar circumstances." Mr. Underwood urged "That there are deplorable conditions in the present economic situation in the United States, and that these are in many instances directly assignable to the tariff, is a fact which cannot be successfully denied. This could not be otherwise in view of long-continued high protection and the peculiar alliance that has existed between the interests profiting by unreasonable duties and the political party imposing such rates."

Chairman Underwood attributed the development of combinations, the reductions of natural resources and the impairment of efficiency to the protective tariff system. He rejected the cost of production theory as measuring the proper rates of duty and set forth the Democratic theory of a competitive tariff as described in the Democratic National platform of 1912. The new tariff bill, he said, was founded on two essential ideas — "one, the establishment of duties designed primarily to produce revenue for the Government *and without thought of protection*, two, the attainment of this end by legislation that will not injure or destroy legitimate industry."

The conflicting Democratic and Republican theories of tariff legislation Chairman Underwood thus outlined:

The dividing line between the positions of the two great parties on this question is very clear and easily ascertained in theory. Where the tariff rates balance the difference in cost at home and abroad, including an allowance for the difference in freight rates, the tariff must be competitive, and from that point downward to the lowest tariff that can be levied it will continue to be competitive to a greater or less extent. Where competition is not interfered with by levying the tax above the highest competitive point, the profits of the manufacturer are not protected. On the other hand, when the duties levied at the custom house are high enough to allow the American manufacturer to make a profit

before his competitor can enter the field, we have invaded the domain of the protection of profits. In our judgment the protection of any profit must of necessity have a tendency to destroy competition and create monopoly, whether the profit protected is reasonable or unreasonable.

Summarizing the various features of the new tariff bill, Mr. Underwood said of Schedule K :

Schedule K, dealing with wools and woollen manufactures, has been the center of criticism for many years and the committee has given it very careful study. The result has been to make raw wool free of duty, and reduce yarns from 79.44 per cent to 20 per cent, blankets from 72.69 per cent to 25 per cent, flannels from 93.29 per cent to 25 and 35 per cent, clothing from 79.56 per cent to 35 per cent, webbings, etc., from 82.07 per cent to 35 per cent, and carpets from rates ranging from 50 per cent to 88 per cent to rates ranging from 20 per cent to 50 per cent.

The Democratic report in favor of the Underwood tariff bill was signed by all of the Democratic members of the Committee on Ways and Means as follows :

OSCAR W. UNDERWOOD, *Chairman*, Alabama.

FRANCIS BURTON HARRISON, New York.

DORSEY W. SHACKLEFORD, Missouri.

CLAUDE KITCHIN, North Carolina.

HENRY T. RAINEY, Illinois.

LINCOLN DIXON, Indiana.

CORDELL HULL, Tennessee.

W. S. HAMMOND, Minnesota.

ANDREW J. PETERS, Massachusetts.

A. MITCHELL PALMER, Pennsylvania.

TIMOTHY T. ANSBERRY, Ohio.

JOHN N. GARNER, Texas.

AUGUSTUS O. STANLEY, Kentucky.

JAMES W. COLLIER, Mississippi.

Hon. Sereno E. Payne, of New York, former Chairman of the Committee on Ways and Means, in presenting the views of the Republican minority stated that the bill had already

caused widespread alarm in business circles. The Democratic Governor of a great State (Massachusetts) in a special message to the Legislature had denounced the proposed Act as a "non-protective tariff for revenue only, unreciprocal, destructive downward revision" and the State Legislature, in response, had memorialized Congress against the bill. The measure seemed to meet with universal approval on the other side of the Atlantic. Mr. Payne said that there was incidental protection in the bill and that this feature was spasmodic and generally had a local coloring. He objected to the ad valorem form of duties of the bill and pointed out that every Secretary of the Treasury except Secretary Walker had opposed ad valorem rates wherever a specific rate was practicable. There was no consideration of the woolen schedule in Mr. Payne's report and none in the other minority report submitted by Mr. Murdock.

THE PAYNE BILL, SCHEDULE K.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Act entitled "An Act to provide revenue, equalize duties, and encourage the industries of the United States, and for other purposes," approved August fifth, nineteen hundred and nine, be, and the same is hereby, amended by striking out all of the paragraphs of Schedule K of section one of said Act, from three hundred and sixty to three hundred and ninety-five, inclusive of both, and inserting in place thereof the following:

1. All wools, hair of the camel, goat, alpaca, and other like animals shall be divided, for the purpose of fixing the duties to be charged thereon, into the two following classes:

2. Class one, that is to say, merino, mestiza, metz. or metis wools, or other wools of merino blood, immediate or remote, Down clothing wools, and wools of like character with any of the preceding, including Bagdad wool, China lamb's wool, Castel Branco, Adrianople skin wool or butcher's wool, and such as have been heretofore usually imported into the United States from Buenos Aires, New Zealand, Australia, Cape of Good Hope, Russia, Great Britain, Canada, Egypt, Morocco, and elsewhere, and Leicester, Cotswold, Lincolnshire, Down combing wools, Canada long wools, or other like combing wools of English blood, and usually known by the terms herein used, and all wools not

hereinafter included in class two, and also the hair of the camel, Angora goat, alpaca, and other like animals.

3. Class two, that is to say, Donskoi, native South American, Cordova, Valparaiso, native Smyrna, Russian camel's hair, and all such wools of like character as have been heretofore usually imported into the United States from Turkey, Greece, Syria, and elsewhere, excepting improved wools hereinafter provided for.

4. The standard samples of all wools, which are now or may be hereafter deposited in the principal custom houses of the United States, under the authority of the Secretary of the Treasury, shall be the standards for the classification of wools under this Act, and the Secretary of the Treasury is authorized to renew these standards and to make such additions to them from time to time as may be required, and he shall cause to be deposited like standards in other custom houses of the United States when they may be needed.

5. Whenever wools of class two shall have been improved by the admixture of merino or English blood, from their present character, as represented by the standard samples now or hereafter to be deposited in the principal custom houses of the United States, such improved wools shall be classified for duty as class one.

6. If any bale or package of wool or hair specified in this Act, invoiced or entered as of class two, or claimed by the importer to be dutiable as of class two, shall contain any wool or hair subject to the rate of duty of class one, the whole bale or package shall be subject to the rate of duty chargeable on wool of class one; and if any bale or package be claimed by the importer to be shoddy, mungo, flecks, wool, hair, or other material of any class specified in this Act, and such bale contain any admixture of any one or more of said materials, or of any other material, the whole bale or package shall be subject to duty at the highest rate imposed upon any article in said bale or package.

7. The duty on all wools and hair of class one, if imported in the grease, shall be laid upon the basis of its clean content. The clean content shall be determined by scouring tests which shall be made according to regulations which the Secretary of the Treasury may prescribe. The duty on all wools and hair of class one imported in the grease shall be 18 cents per pound on the clean content, as defined above. If imported scoured, the duty shall be 19 cents per pound.

8. The duty on all wools of class two, including camel's hair of class two, imported in their natural condition, shall be 7 cents per pound. If scoured, 19 cents per pound: *Provided*, That on consumption of wools of class two, including camel's hair, in the manufacture of carpets, druggets and bockings, printed, colored, or otherwise, mats, rugs for floors, screens, covers, hassocks, bed-sides, art squares, and portions of carpets or carpeting hereafter manufactured or produced in the United States in whole or in

part from wools of class two, including camel's hair, upon which duties have been paid, there shall be allowed to the manufacturer or producer of such articles a drawback equal in amount to the duties paid less 1 per centum of such duties on the amount of the wools of class two, including camel's hair of class two, contained therein; such drawback shall be paid under such rules and regulations as the Secretary of the Treasury may prescribe.

9. The duty on wools on the skin shall be 2 cents less per pound than is imposed upon the clean content as provided for wools of class one, and 1 cent less per pound than is imposed upon wools of class two imported in their natural condition, the quantity to be ascertained under such rules as the Secretary of the Treasury may prescribe.

10. Top waste and slubbing waste, 18 cents per pound.

11. Roving waste and ring waste, 14 cents per pound.

12. Noils, carbonized, 14 cents per pound.

13. Noils, not carbonized, 11 cents per pound.

14. Garnetted waste, 11 cents per pound.

15. Thread waste, yarn waste, and wool wastes not specified, 9½ cents per pound.

16. Shoddy, mungo, and wool extract, 8 cents per pound.

17. Woolen rags and flocks, 2 cents per pound.

18. Combed wool or tops, made wholly or in part of wool, or camel's hair, 20 cents per pound on the wool contained therein, and in addition thereto 10 per centum ad valorem.

19. Wool and hair which have been advanced in any manner or by any process of manufacture beyond the washed or scoured condition, but less advanced than yarn, not specially provided for in this section, 20 cents per pound on the wool contained therein, and in addition thereto 10 per centum ad valorem.

20. On yarns, made wholly or in part of wool, valued at not more than 30 cents per pound, the duty shall be 21½ cents per pound on the wool contained therein, and in addition thereto 10 per centum ad valorem.

Valued at more than 30 cents and not more than 50 cents per pound, 21½ cents per pound on the wool contained therein, and in addition thereto 15 per centum ad valorem.

Valued at more than 50 cents and not more than 80 cents per pound, 21½ cents per pound on the wool contained therein, and in addition thereto 20 per centum ad valorem.

Valued at more than 80 cents per pound, 21½ cents per pound on the wool contained therein, and in addition thereto 25 per centum ad valorem.

21. On cloths, knit fabrics, flannels, felts, and all fabrics of every description made wholly or in part of wool, not specially provided for in this section, valued at not more than 40 cents per pound, the duty shall be 25 cents per pound on the wool contained therein, and in addition thereto 30 per centum ad valorem.

Valued at more than 40 cents and not more than 60 cents per pound, 26 cents per pound on the wool contained therein, and in addition thereto 35 per centum ad valorem.

Valued at more than 60 cents and not more than 80 cents per pound, 26 cents per pound on the wool contained therein, and in addition thereto 40 per centum ad valorem.

Valued at more than 80 cents and not more than \$1 per pound, 26 cents per pound on the wool contained therein, and in addition thereto 45 per centum ad valorem.

Valued at more than \$1 and not more than \$1.50 per pound, 26 cents per pound on the wool contained therein, and in addition thereto 50 per centum ad valorem.

Valued at more than \$1.50 per pound, 26 cents per pound on the wool contained therein, and in addition thereto 55 per centum ad valorem.

22. On blankets and flannels for underwear composed wholly or in part of wool, valued at not more than 40 cents per pound, the duty shall be $23\frac{1}{2}$ cents per pound on the wool contained therein, and in addition thereto 20 per centum ad valorem.

Valued at more than 40 cents and not more than 50 cents per pound, $23\frac{1}{2}$ cents per pound on the wool contained therein, and in addition thereto 25 per centum ad valorem.

Valued at more than 50 cents per pound, $23\frac{1}{2}$ cents per pound on the wool contained therein, and in addition thereto 30 per centum ad valorem.

Provided, That on blankets over three yards in length the same duties shall be paid as on cloths.

23. On ready-made clothing and articles of wearing apparel, knitted or woven, of every description, made up or manufactured wholly or in part and composed wholly or in part of wool, the rate of duty shall be as follows:

If valued at more than 40 cents per pound, the duty shall be 25 cents per pound on the wool contained therein, and in addition thereto 35 per centum ad valorem.

If valued at more than 40 cents and not more than 60 cents per pound, 26 cents per pound on the wool contained therein, and in addition thereto 40 per centum ad valorem.

If valued at more than 60 cents and not more than 80 cents per pound, 26 cents per pound on the wool contained therein, and in addition thereto 45 per centum ad valorem.

If valued at more than 80 cents and not more than \$1 per pound, 26 cents per pound on the wool contained therein, and in addition thereto 50 per centum ad valorem.

If valued at more than \$1 and not more than \$1.50 per pound, 26 cents per pound on the wool contained therein, and in addition thereto 55 per centum ad valorem.

If valued at more than \$1.50 per pound, 26 cents per pound on the wool contained therein, and in addition thereto 60 per centum ad valorem.

24. On all manufactures of every description made wholly or in part of wool, not specially provided for in this section, the duty shall be 26 cents per pound on the wool contained therein, and in addition thereto 50 per centum ad valorem: *Provided*, That if the component material of chief value in such manufactures is wood, paper, rubber, or any of the baser metals, the duty shall be 26 cents per pound on the wool contained therein, and in addition thereto 35 per centum ad valorem, and if the component material of chief value in such manufactures is silk, fur, precious or semiprecious stones, or gold, silver, or platinum, the duty shall be 26 cents per pound on the wool contained therein, and in addition thereto 55 per centum ad valorem.

25. On hand-made Aubusson, Axminster, Oriental, and similar carpets and rugs, made wholly or in part of wool, the rate of duty shall be 50 per centum ad valorem; on all other carpets of every description, druggets and bockings, printed, colored, or otherwise, mats, rugs for floors, screens, covers, hassocks, bed-sides, art squares, and portions of carpets or carpeting, made wholly or in part of wool, the duty shall be 30 per centum ad valorem.

26. Whenever, in any schedule of this Act, the word "wool" is used in connection with a manufactured article of which it is a component material, it shall be held to include wool or hair of the sheep, camel, goat, alpaca, or other like animal, whether manufactured by the woolen, worsted, felt, or any other process.

27. The foregoing paragraphs, providing the rates of duty herein for manufactures of wool, shall take effect on the first day of January, nineteen hundred and fourteen.

DEBATE ON THE BILL.

Debate on the Underwood tariff bill began on Wednesday, April 23. Chairman Underwood opened the discussion in favor of his bill. He said that the enactment of the law would mark the beginning of a new era in the fiscal legislation of the country. The real question to consider was that of the rights and interests of the consuming masses of the American people. The question of industry was and must be secondary to the rights and necessities of the great American consuming public. The effect of tariff reduction would not be immediate. Retail merchants had fixed their prices on goods bought under conditions fixed by Republican legislation. They would not reduce their prices until they were compelled to, but within a reasonable time, when present stocks of goods were sold out, the American people would

receive a real reduction in the cost of living. The Democrats stood for a tariff for revenue only, with the emphasis upon the word "only."

Representative Augustus P. Gardner, of Massachusetts, speaking on the Republican side, addressing Mr. Payne, said in his speech that Schedule I and Schedule K, the cotton and the woolen schedules, never met with Mr. Payne's approval but were voted into the Aldrich-Payne tariff law over his protest and against his will. Yet, through the four years which have passed, Mr. Payne had uttered no word to defend himself, at the expense of his co-workers. Mr. Payne had a weary burden of reproach to bear and right generously had he borne it.

Representative Frank W. Mondell, of Wyoming, spoke particularly for the Western wool growers. Free wool, he said, meant loss and depression to the entire sheep and wool industry and complete destruction of the most important part, that of merino and mixed blood sheep. Not content with having brought great loss on American wool growers by tariff agitation, the advocates of the bill were now using present low wool prices for which they were largely responsible as an argument for making duties still lower under free trade. The fact was, however, that while prices had been greatly depressed during the tariff agitation, actual comparison of London and Boston prices of identical wools made within the past few months shows a difference in favor of the American grower by reason of the present tariff of from $5\frac{1}{2}$ to $7\frac{1}{2}$ cents per pound.

Hon. N. J. Sinnott, a Republican Representative from Oregon, offered an amendment to the Underwood bill putting all articles made of wool upon the free list. Mr. Sinnott protested that he did not present this amendment in any retaliatory spirit nor on the theory that misery loves company. He offered it for the purpose of making the bill a consistent and harmonious whole. Mr. Sinnott's amendment was rejected by the House, the Democratic majority opposing it.

Hon. Joseph W. Fordney of Michigan, a Republican member of the Committee on Ways and Means, sharply attacked

the woolen schedule of the Underwood bill as unjust both to the manufacturer and to the wool grower. He said that while the manufacturer had inadequate protection, the wool grower had none, and both alike would suffer as they had under the Gorman-Wilson law of 1894. Mr. Fordney cited impressive facts and figures to prove the disastrous results of that law, and predicted similar consequences from the Underwood measure.

Hon. Frank B. Willis, Republican, of Ohio, said that the farmer understood that in the pending bill he had been buncoed — that his farm products and wool were placed upon the free list but woolen goods were protected. Hon. Francis Burton Harrison, Democrat, of New York, a member of the Committee on Ways and Means, urged that Western Republicans who were trying to put woolen clothing on the free list were actuated by a spirit of pique or irritation. Mr. Harrison said that raw wool had been reduced from 45 per cent to the free list, but that woolen clothing had been reduced from an average of 94 per cent to 35 per cent, a much greater proportionate reduction than was made on raw wool. He regarded free wool as the greatest achievement of the present tariff bill — not only for economic reasons but because it spelled the doom of the system of protection in the United States.

MR. UNDERWOOD'S PLEA.

In closing the debate on the woolen schedule Chairman Underwood said that some gentlemen had criticised him because he brought in a taxed-wool bill last year and was standing for a free wool bill this year. When he brought into the House last year a bill levying a tax of 20 per cent on raw wool, it was done for no other reason than to get revenue. We did not have the right at that time to levy an income tax. Conditions had changed and we had the right to-day to levy taxes wherever they would bear most lightly on the consumer. Taxed wool did not benefit the manufacturing people, they were not interested in it, the only issue was whether it was necessary to place that great

tax on the American people to preserve the sheep industry in America. Mr. Underwood quoted from the Tariff Board Report and contended that in the far western country flocks could be preserved for wool purposes as well as they could be in the Argentine, and that in the middle western country where there was a market for mutton, the industry could thrive as well as in Great Britain.

On Thursday, May 8, the Underwood bill came up for final action in the House of Representatives. It was passed by a vote of 281 to 139. Two Republicans, Cary and Stafford of Wisconsin, supported it, as did four Progressives, Kelly and Rupley, of Pennsylvania, Nolan, of California, and Bryan, of Washington, and also Kent, of California, independent Progressive. Mr. Murdock, of Kansas, the Progressive leader, and thirteen of his Progressive colleagues voted with the Republicans against the bill. Five Democrats voted against the bill — Broussard, Dupre, Lazaro, and Morgan, of Louisiana, and C. B. Smith, of New York.

IN THE SENATE.

THE Underwood tariff bill as passed by the House was received on May 9 in the Senate, and Hon. F. M. Simmons, the Chairman, immediately moved that the bill be referred to the Committee on Finance. But a discussion arose over the suggestion of Hon. Boies Penrose, of Pennsylvania, and other Republican Senators that full public hearings be granted by the Committee on Finance to American manufacturers and merchants who had urgently requested that such hearings be held.

After an earnest and prolonged discussion the Senate voted to refer the bill to the Committee on Finance without such public hearings. Sub-Committees of the Committee on Finance were appointed by Chairman Simmons to divide the preliminary consideration of the various schedules of the bill. The sub-Committee to which the woolen schedule was entrusted was made up of Chairman Simmons, *ex-officio*, Hon. William J. Stone, of Missouri, the Chairman of the

sub-Committee, Hon. Charles S. Thomas, of Colorado, and Hon. Ollie M. James, of Kentucky.

THE PROTEST OF THE ASSOCIATION.

This Committee caused it to be known that while there were to be no formal public hearings, a few accredited representatives of the industry would be listened to. Consideration of the woolen schedule under this arrangement was begun on May 21, when Mr. Marvin, the Secretary of the National Association of Wool Manufacturers, appeared. Before this, on the very day on which the Underwood bill reached the Senate, a protest had been addressed to the Committee by President Wood and the Secretary as follows :

NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.
683 Atlantic Avenue, Boston, Mass.

MAY 9, 1913.

TO THE COMMITTEE ON FINANCE, United States Senate, Washington, D.C.

DEAR SIRs : We wish to enter our earnest protest against the woolen schedule of the Underwood tariff bill, for the following reasons :

1st. The proposed rates of duty are on the whole inadequate, and their adoption would be a menace not only to the prosperity but to the existence of the woolen manufacture in the United States.

2d. The proposed duties on the products of manufacture at their different stages from tops to finished cloth do not give proper consideration to the relative differences in the costs and values of those different products.

3d. The provision of a single ad valorem each for tops, yarns, cloths, and dress goods is a perilous expedient, calculated to destroy important parts of the industry and to deprive the Government of proper revenue. A tariff made up wholly on the ad valorem basis is contrary to the practice of the modern world, and has always been deprecated by most of the wisest of American statesmen.

4th. The duty proposed on finished goods — 35 per cent ad valorem — is far below the 40 and 50 per cent of the Gorman-Wilson tariff law of 1894, which proved disastrous to this as to other American industries. Since 1894 wages in American woolen mills have advanced from 30 to 40 per

cent. There has been no corresponding increase in the competing mills of Europe.

5th. Not only are weekly earnings from two to four times as great in this industry in America as they are abroad, but the actual cost of spinning a pound of yarn or weaving a yard of cloth is at least twice as great here as it is in Europe — this is the explicit statement of the recent Tariff Board. Moreover, because of the higher general wages in this country, the cost of the buildings and machinery of a woolen mill is about 50 per cent larger than in Great Britain.

6th. Differences so great as these in the cost of manufacture cannot be covered by a duty of 35 per cent, which would in actual practice amount to less than 30 per cent, because of undervaluations of imported merchandise.

7th. We recognize that the Democratic party is pledged to a downward revision of the tariff, but we respectfully urge that it has never been pledged to such extreme changes as are embodied in the pending bill. The serious crippling of a great national industry and the destruction of parts of it are certainly not desired nor expected by the American people.

We respectfully ask that your Committee will so modify the woolen schedule of this bill that it may accord with your platform promises and the assurance of the President, that in the process of readjustment of our tariff laws no legitimate American industry shall be injured.

Very truly yours,

JOHN P. WOOD, *President*,
WINTHROP L. MARVIN, *Secretary*.

AN INTERVAL OF SIX MONTHS.

At the interview of May 21, the Secretary of the Association presented a formal request for an interval of six months before the reduced duties on woolen manufactures took effect, as follows:

NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.
683 Atlantic Avenue, Boston, Mass.

MAY 21, 1913.

HON. WILLIAM J. STONE, *Chairman*, HON. CHARLES S. THOMAS, and
HON. OLLIE M. JAMES, sub-Committee on the Woolen Schedule,
Committee on Finance, United States Senate, Washington, D.C.

DEAR SIRs: In the memorial of the National Association of Wool Manufacturers submitted by President John P.

Wood, of Philadelphia, to the Committee on Ways and Means January 27, 1913, we said:

"In any reduction of the tariff a sufficient period should be allowed between the taking effect of the new duties on raw materials and the taking effect of the new duties on the finished products. Otherwise the manufacturers of the United States will be seriously discriminated against by American law-makers in favor of the manufacturers of Europe. The woolen business is a business of two distinct seasons, and any new tariff on woolen manufactures ought not to be put into effect in the midst of either, but rather should become operative at the end of one season and the beginning of the next. The soundness of this principle of legislation was acknowledged by Chairman Wilson and the other authors of the Gorman-Wilson tariff law, which as to free raw wool went into effect on August 27, 1894, and as to manufactured products on January 1, 1895. This plan left an interval of transition of more than four months, in which American manufacturers could gradually dispose of goods produced on a relatively high level of wool values, and could also begin the fabrication of goods produced on the lower level of wool values which free wool had introduced.

"That plan was fair to American mills and fair to the public. It softened the shock of changing economic policies, and enabled American manufacturers to meet on more nearly equitable terms the intensified competition of their rivals abroad.

"Chairman Wilson said of the expedient that it 'was a matter of very great importance, and one to which the majority members of the Committee have given as much anxious investigation as to any question connected with the whole tariff bill.' Mr. Wilson added that 'the Committee seemed to be relentlessly driven to the conclusion' outlined above."

The woolen manufacture now, as in 1894, is in a peculiar position in that the impending tariff revision puts its raw material on the free list, effacing a duty that has averaged from 44 to 50 per cent. Such a sweeping change involves a sharp reduction in the value of stocks of wool on hand or in process of manufacture. There is, therefore, an urgent reason for a postponement of the taking effect of the new duties on woolen goods that does not apply to any other important industry immediately affected by the proposed tariff bill. The principles involved are the same now as they were when the same question was considered by Chairman

Wilson in 1894, and we respectfully ask that the same wise and equitable action be taken by the Committee on Finance. A copy of Chairman Wilson's remarks * upon the subject is appended.

Sincerely yours,

WINTHROP L. MARVIN,
Secretary.

Mr. Wilson of West Virginia: Mr. Chairman, this is a matter of very great importance and one to which the majority members of the Committee have given as much anxious investigation as to any question connected with the whole tariff bill, and I shall endeavor to state frankly to the Committee why we seem to be resistlessly driven to the conclusion we have been driven to, by the offering of these amendments, namely, to adopt the first day of August as the date for putting wool upon the free list, and the first day of December for making the corresponding reduction in the schedule of woolen manufactures.

I confess I sympathize with the feeling of my friend from Ohio (Mr. Johnson). He is not more eager than I am myself — he can be no more eager to relieve the American people from what I consider to be a blot on our civilization in the high duties maintained in this woolen schedule; and when I was probably in the same stage of investigation that the gentleman from Ohio now is, my opinions in regard to the matter were exactly those that the gentleman has uttered here upon the floor. When this bill was first prepared, we had fixed the date of the passage of the bill as the first day of March, hoping it would become a law by as early a date as that time. Free wool, then, would have taken effect upon the first day of March, according to the provisions of the original proposal, and the reductions in the woolen schedule would have gone into effect on the first day of December. Nobody now can say that the bill can become a law by March 1, or at least nobody can definitely state or accurately prophesy on what particular date it will be enacted into law. We have got to take into consideration existing business conditions in the country, and the regular courses of trade; we have got to take into consideration the present condition of the woolen manufacturing industries, and as stated by the gentleman from New York, there are two great seasons for manufacturing woolen goods in the United States.

* 53d Congress, 2d Session, January 16, 1894. Cong. Rec. 137, page 890.

Ordinarily, were there no uncertainty as to the law, the manufacturers of woollen goods would be to-day receiving their large orders from the jobbing houses for the woollen goods to be consumed by the American people next fall. As long as doubt remains as to the date when these changes will go into effect, the jobbers are withholding their orders. They will not give them to the American manufacturers for goods for next fall, if there is a prospect that they can in a few months order the same goods from foreign manufacturers, made upon a free-wool basis and with the taxes on the finished product graduated according to a free-wool basis. We must, therefore, take into consideration that condition of affairs. We must take into consideration the course of trade and manufacturing in the woollen industry.

It is simply a question as to whether our own manufacturers shall remain idle during these winter months and whether the employees in the woollen mills shall be out of employment in these winter months, because of the uncertainty, or whether this House shall definitely say and say now, "You can go on with your winter manufacturing and we will fix these dates far enough ahead to prevent the destruction of your spring business." Now, Mr. Chairman, as I have learned the course of the trade in woollen manufactures, orders are taken from this time until late in the spring by the American manufacturers, for goods to be used next fall.

(The time of Mr. Wilson of West Virginia having expired, by unanimous consent it was extended five minutes.)

Mr. Wilson of West Virginia: The jobbers and the woollen trade generally, the wholesale clothing makers and the retail storekeepers are all to-day uncertain as to what they should do. If they will not give their orders to the manufacturers the mills cannot start. If the mills cannot start there is no market for the American farmer. He must be allowed to work off his spring clip, which he can do before the first of August and then, with the bars thrown down, with the invitation to the wool of all the world to come here to help clothe the American people at reasonable prices, the woollen mills can start up again: and, with the duties taken off of woollen goods, by the first of December the American consumer can get his choice between imported goods at the new rates of duty, and home-made goods made of untaxed wool at the new rates of duty. It was for this reason that reluctantly and slowly—as reluctantly as I ever consented to anything in my life, by yielding to what seemed to me to

be the resistless logic of the situation — I moved from the view occupied by the gentleman from Ohio and the gentleman from Illinois (Mr. Springer) and, with my colleagues of the majority of the Committee, determined to report these as the proper dates for the going into effect of the woolen schedule.

THE SUBJECT OF BROKEN TOPS.

The Secretary emphasized this request for a six months' interval in the course of a verbal statement to the Committee in which he spoke also of the need of a specific provision in the new tariff bill to prevent the importation of broken tops free of duty. The written brief submitted on this point was as follows :

NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.
683 Atlantic Avenue, Boston, Mass.

MAY 21, 1913.

HON. WILLIAM J. STONE, *Chairman*, HON. CHARLES S. THOMAS, and
HON. OLLIE M. JAMES, sub-Committee on the Woolen Schedule,
Committee on Finance, United States Senate, Washington, D.C.

DEAR SIRs: In paragraph 295, Schedule K, of the proposed tariff bill, combed wool or tops are made dutiable at 15 per cent ad valorem. In paragraph 654, top waste is made free of duty.

Responsible manufacturers with experience both in this country and in England state that with top waste thus non-dutiable, tops can be broken up in lengths of several feet in England and brought into this country duty free, depriving the Government of considerable revenue and at the same time injuring one of the branches of the American wool manufacture and intensifying whatever injury may come to the wool growers from free wool.

It would not be necessary to recomb these broken tops. At an expense of from one cent to one and one-half cents per pound, according to quality, the broken tops could be re-gilled and thus made ready for the next process of manufacture. The proposed duty of 15 per cent on tops would mean 9 cents a pound on merino tops, so that if broken tops were imported free and one and one-half cents a pound were paid for re-gilling them, seven and one-half cents of the duty would be evaded.

It is earnestly recommended that after the word "tops" in paragraph 295 there should be inserted the words "tops

broken for the purpose of evading the duty," so that broken tops and genuine top waste can be clearly differentiated in the proposed tariff law. This would deal justly with the American wool manufacture, of which top making is a regular and important part, and it would also protect the interests of the Government. There will assuredly be large importations of broken tops free of duty under the guise of top waste unless the tariff bill is carefully amended in this particular.

I trust that the suggested change will commend itself to the judgment of the sub-Committee on the Woollen Schedule and the Committee on Finance.

Sincerely yours,

WINTHROP L. MARVIN,
Secretary.

A HIGHER DUTY ON WOOLEN HOSIERY.

A request that the duty on woollen hosiery be fixed at rates equal to those proposed on cotton hosiery was presented to the Senate sub-Committee as follows :

NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.
683 Atlantic Avenue, Boston, Mass.

MAY 24, 1913.

HON. WILLIAM J. STONE, *Chairman*, HON. OLLIE M. JAMES, and HON. CHARLES S. THOMAS, sub-Committee on the Woollen Schedule, Committee on Finance, United States Senate, Washington, D.C.

DEAR SIRs: In paragraph 265 of Schedule I of the proposed tariff bill, cotton hosiery is made dutiable at 40 and 50 per cent ad valorem.

In paragraph 300, Schedule K, knitted articles, that would include hosiery, wholly or in chief value of wool, are made dutiable at 35 per cent ad valorem.

It is understood that a very careful examination has been given by the Committees in the House and the Senate of the subject of cotton hosiery and that the firm conclusion has been reached that the proposed rates of 40 and 50 per cent are just and adequate.

But it is respectfully urged by manufacturers of woollen hosiery that their product is equally deserving of consideration with cotton hosiery — that the woollen hosiery costs relatively more to manufacture and should not be dutiable at a lower rate.

Under the proposed bill as it now stands, a pair of all-woolen hose would be dutiable at 35 per cent. But a pair of hose 49 per cent in value of wool and 51 per cent in value of cotton, if a good article, would be dutiable at 50 per cent. Such a discrimination is practically calculated to discourage and perhaps destroy the manufacture of woolen hosiery in the United States — a result that certainly could not have been desired by the Committees of Congress that have been considering this bill.

It is stated by manufacturers of woolen hosiery that the percentage of labor in their product is about 15 per cent more than in cloths. Moreover these manufacturers urge upon the attention of your committee the fact that hosiery was dutiable at a rate of 50 per cent in the Gorman-Wilson tariff of 1894.

These manufacturers ask that woolen hosiery be given the same rates of duty as cotton hosiery. They hope that the justice of their request will be recognized by the Senate Committee on Finance.

Sincerely yours,

WINTHROP L. MARVIN,

Secretary.

A REQUEST FOR FREE ALPACA.

At the desire of manufacturers engaged in the production of alpaca fabrics, the Secretary presented a brief on this subject, asking that alpaca be taken from the special mohair paragraph and put on the free list, as not produced in the United States:

NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.
683 Atlantic Avenue, Boston, Mass.

MAY 22, 1913.

HON. WILLIAM J. STONE, *Chairman*, HON. CHARLES S. THOMAS, and HON. OLLIE M. JAMES, sub-Committee on the Woolen Schedule, Committee on Finance, United States Senate, Washington, D.C.

DEAR SIRs: In paragraph 314, Schedule X, of the proposed tariff bill, the hair of the alpaca is subject to a duty of 20 per cent ad valorem, and in subsequent paragraphs tops, yarns, cloth, and other manufactures of alpaca are subject to duties ranging from 25 to 50 per cent.

On behalf of manufacturers using alpaca as a raw material, I respectfully urge that these proposed rates on manufactures are inadequate to safeguard the American industry, and that

alpaca be placed upon the free list. The alpaca is native to Peru and adjacent countries, and, unlike the Angora goat, producing mohair, has never been domesticated in the United States. Our entire supply of alpaca must therefore be imported, and the placing of a duty upon it inevitably increases the cost of the material without the slightest pretense of any advantage to any industry in this country.

Alpaca is used for the manufacture of coat linings and lustrous dress goods, indispensable fabrics of the masses of the people. These fabrics can by no stretch of the imagination be regarded as luxuries. Alpaca should never have been classed with mohair, as it does not sufficiently compete with this fiber. It is impossible to make plush of it, as it is so soft and silky, and it should rather have been classed with wool.

As alpaca is not produced in this country, the proposed duty of 20 per cent is an unnecessary and profitless burden, first on the American manufacturers of alpaca fabrics, and second on the millions of purchasers of alpaca goods. If revenue is desired, it could much better be derived from some article of voluntary use not produced in the United States and not such a necessary article of every day consumption. The case for putting alpaca upon the free list is much stronger than the case for a similar treatment of wool.

Sincerely yours,

WINTHROP L. MARVIN,
Secretary.

RECALLING THE GORMAN-WILSON TARIFF.

Because of the suggestions of one or two of the Senators at the hearing before the sub-Committee on May 21, that the financial panic of 1893 might have produced the depression from which the wool manufacture suffered under the Gorman-Wilson tariff law of 1894, this additional brief was presented to the Committee, as follows:

NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.
683 Atlantic Avenue, Boston, Mass.

MAY 29, 1913.

HON. WILLIAM J. STONE, *Chairman*, HON. CHARLES S. THOMAS,
and HON. OLLIE M. JAMES, sub-Committee on the Woolen
Schedule, Committee on Finance, United States Senate, Wash-
ington, D.C.

DEAR SIR: In the course of my statement before your sub-Committee Wednesday, May 21, a point was raised by

members of the Committee as to the severe disaster that overtook the American wool manufacture in 1894-1897, and the suggestion was made that the disaster might have been due to the world-wide financial depression that began in 1893.

Undoubtedly that financial panic was a factor in the business misfortunes of 1894, the year in which the Gorman-Wilson law went into general operation. But it should be borne in mind that the reduced duties of 40 and 50 per cent on woolen goods did not go into effect until January 1, 1895. This interval of four months between August 27, 1894, when raw wool went upon the free list, and January 1, 1895, made the change to reduced duties on woolen goods less harassing to American manufacturers. Nevertheless, the years 1895 and 1896 were years of suffering and ruin to a great many American woolen mills.

The Bulletin of the National Association of Wool Manufacturers, in summarizing the experience of the calendar year 1895, said :

From the date upon which the Wilson tariff law went into effect, a tide of imported woollens has surged into the country, at the average rate of \$5,000,000 per month, reaching the great total for the year of \$60,000,000 foreign value, and having a duty-paid value of \$90,000,000, which is about one-third of the total value of all domestic wool manufactures, as reported by the census of 1890, and is considerably more than one-third of the total value of our domestic manufactures in 1895. In view of the extraordinary shrinkage in invoice valuations, and making allowance for undervaluations, this total represents an aggregate quantity of woollens more than double that which ever before passed the custom houses in twelve months.*

One-half of the American woolen mills at one time or another in that year 1895 were idle. In some manufacturing communities the crisis was so acute that the operatives out of work had to be supported by the manufacturers or by public charity.

If a financial panic covering the whole world in 1893 were the cause of this disaster in American wool manufacturing, the same deplorable conditions would have been found to exist in the woolen trade of England, our principal competitor. But, as a matter of fact, the year 1895 in the English woolen trade was a year of wonderful prosperity.

* Vol. XXVI., page 43.

The Bradford "Yorkshire Observer," in its annual review of the woolen industry for 1895, described the year as "the most extraordinary of the waning century," and frankly attributed the English good fortune in a very large degree to "the more reasonable tariff adopted by the United States."

Helmuth Schwartze & Company's annual report on the same year declared that "the dominant factor in the past twelve months has been the recovery and rapid development of the export trade of wool and woolens to the United States under the stimulating influence of free wool and reduced duties on goods."

The "London Times" in a review of the Yorkshire woolen trade for 1895 described the prosperity of that year as "a matter not only for local but for national congratulation," and attributed it, in the main, to the new American tariff. The "Times" pointed out that the sales of Bradford worsted coatings in America under the lowered duties had increased almost 400 per cent.

If the financial panic of 1893 were still operative in 1895, it would have produced depression in the English wool manufacture as well as in the American wool manufacture. But this significant contrast of severe distress in the American woolen mills simultaneously with remarkable prosperity in the English woolen mills could have been due only, as these English authorities frankly said, to the radical changes in American tariff legislation.

The Gorman-Wilson law, with free wool, provided a duty of 40 and 50 per cent on woolen goods—the latter and higher rate applying to the great bulk of woolens imported. The present proposed tariff bill, with free wool, provides a duty of 35 per cent on woolen cloths and dress goods. It is quite probable that the growth of the wool manufacture since 1897 in America has been such that a duty of approximately 50 per cent would now maintain most branches of the industry. But a radical reduction to 35 per cent will inevitably mean a repetition of the distress of 1895–1897 in American woolen mills, coupled with high prosperity among their English rivals. This is a result which we cannot believe that your Committee has either desired or contemplated. Such a reduction is far below the danger point.

Sincerely yours,

WINTHROP L. MARVIN,

Secretary.

MR. WHITMAN'S STATEMENT.

On May 23 there appeared before Senator Stone's Committee Mr. William Whitman, of Boston, a former president of the National Association of Wool Manufacturers, and Mr. Julius Forstmann, of Passaic, a member of the advisory and executive committees of the Association.

Mr. Whitman spoke at some length to the Committee and was questioned by the Senators. He presented a prepared address as follows :

I respectfully crave the indulgence of your Honorable Committee to present briefly certain general considerations bearing on the history and growth of the textile industry in the United States and certain specific facts and recommendations as to the effect and amount of duties levied on woollen manufactures.

I desire to preface the considerations and recommendations which I have to propose with a brief statement of the point of view from which I approach the subject. It is that of a merchant and manufacturer whose entire adult life has been occupied in organizing and carrying on the textile industries. My economic views are the result of an experience in the active management of manufacturing companies extending over the period of all tariff changes since 1867. Yet, the suggestions I have to offer are not made with political bias and they are intended to be uncolored by any economic theories. The tariff is to be revised, and the revision is to be made on a different principle from that which underlies the act which it is to supersede. It is none the less desirable, and it is no doubt desired by those who are to make the revision, that it shall be done with a view to the common good, and without injury to established industries.

ACTION SHOULD BE TAKEN AS SOON AS POSSIBLE.

That being admitted, I submit in the first place that if a wise and salutary law can be passed, the sooner it is enacted the better it will be for manufacturers, producers in other lines of industry, and consumers. There is no more serious

impediment to industrial activity and to commercial prosperity than the uncertainty that is inevitable while tariff rates on imported goods competing with our own productions are under discussion. Home manufacturers, however, should be allowed reasonable time after enactment to adjust themselves to the changed rates and conditions under which they must compete with foreign rivals.

THE TEXTILE INDUSTRY LONG AND SUCCESSFULLY ENCOURAGED BY WISE PUBLIC POLICY IN ORDER TO MAKE OUR COUNTRY INDEPENDENT.

The textile industries, in which I take the largest interest, and toward which all my suggestions are directed, have had a remarkable history. In the early years under the Constitution they were almost non-existent. Every President of the United States down to and including General Jackson, maintained in his messages to Congress the importance of independence of foreign countries in the supply of food and clothing of the people. For a long period, therefore, the policy of the nation was directed with patriotic insistence to the securing of that end, and ultimately it was accomplished. Through many long periods of depression, disaster and loss the industries using wool as their material have been fully established under the wise policy of encouragement advocated by our Presidents and statesmen of earlier generations irrespective of parties. The cotton manufacture reached that position earlier, and with fewer evil seasons. The beneficial results of that policy should not be jeopardized. *It is easier to destroy than to build up.* In recent years the development has been marvelous, particularly in the period from 1897 to 1909.

THE GROWTH OF THE INDUSTRY HAS KEPT DOWN PRICES IN THE WORLD'S MARKET. DOMESTIC MANUFACTURERS SUBJECT TO KEEN COMPETITION.

That growth has had a marked influence, not only at home, but also upon world-prices. The fact that the cotton and woolen industries are so far developed that they are capable of supplying, as they do supply, the domestic demand with a

further capacity for increase when needed, indicates that domestic competition is keen.

It has had the effect of keeping down prices abroad, for it is evident that if the large American demand had been added to that of the present customers of British and European manufacturers, the inexorable law of supply and demand would have raised foreign prices. To a level with those which have prevailed under our tariff laws? Who can say?

It is clear then that any action which will terminate the present condition — that of the ability of the textile manufacturers to supply the entire wants of the country for such goods as they produce — will inflict an injury not only upon the manufacturers but upon the country as a whole.

NO TRUST OR COMBINATION IN THE INDUSTRY TO PREVENT
KEENEST COMPETITION. PROFITS NOT EXCESSIVE.
DANGEROUS TO HOME COMPETITION TO KILL OFF
SMALLER MANUFACTURERS.

There is not and never has been a combination of independent textile manufacturers in this country nor has any one company or consolidation of companies ever obtained such a degree of control of the domestic production as to militate against competition of the keenest intensity. Save in a few scattered cases, the profits of the manufacturers have not been large. If this be true, then, we already have as severe home competition as is wholesome or desirable and it follows that the introduction of extensive competition from abroad will tend to reduce the competition between domestic manufacturers by forcing the smaller manufacturers out of business. Meanwhile, we note it as a fact that the competition that has existed has kept the price of home products down to as low a point as is consistent with continued moderate prosperity of the industry as a whole.

DUTIES SHOULD NOT BE EXCESSIVE. UNNECESSARILY HIGH
DUTIES SHOULD BE REDUCED.

The ability to supply the home market has heretofore been maintained by a tariff sufficiently high to induce capital to go

into the industry. But it is not to the advantage of manufacturers that the rates of the tariff should be too high, for the effect of an excessive tariff is to cause too rapid a development of industries and too great an increase of producing plant, with consequent excessive competition and unprofitable selling prices resulting in unstable and intermittent employment of labor and capital. It is therefore not merely conceded, it is desired, that all unnecessarily high rates be reduced.

FUNDAMENTAL PRINCIPLES UPON WHICH A TARIFF LAW SHOULD BE BASED.

I conceive that two principles should underlie fundamentally every tariff law, upon whatsoever economic theory it is based.

FIRST: EQUALITY OF OPPORTUNITY.

It should be framed neither for the benefit of any special interests, nor with hostility to any legitimate industry, however loud the popular clamor of the moment against it. That is a proposition that needs no argument to support it, no addition to develop or explain it.

SECOND: STABILITY AND EQUITY.

It should be the aim of the framers of a tariff act to fix the rates with such broad, conservative, and reasonable regard for the interests of all concerned — manufacturers, as well as consumers of goods — as will ensure the continuance of the tariff for a considerable number of years, indefinitely in fact, until the conditions have changed which originally made the act a wise one. Permanence and stability are essential to the success of any tariff measure, and to the general welfare. If the law be wisely made, it will stand. If it is inequitable, oppressive, destructive, it will be repealed. It will operate injuriously while it is in force; it will lead to derangement of business while the agitation for a new law continues; it will give place to a reactionary measure, as bad perhaps in its effects as that which it replaces.

REASONABLE PROFITS AND EQUALITY OF OPPORTUNITY
SHOULD ALSO BE ASSURED TO HOME MANUFACTURERS
AS AGAINST FOREIGN MANUFACTURERS.

It is an elementary proposition that no business can continue to exist which is not sufficiently remunerative to attract the investment of capital. No industry should be granted excessive rates of duty. Our political history, however, shows the danger of reducing duties affecting the products of home industries which are of national utility, and which have been long established, to a point which would deprive them of a degree of prosperity comparable to that of other industries of our country.

LEGISLATION AFFECTING ONE INDUSTRY INEVITABLY
AFFECTS ALL OTHERS.

The foregoing observations apply to all the industries popularly designated as the "protected" industries. As a matter of fact, owing to the interdependence of industries, labor in all occupations is equally protected by the tariff laws, whether that labor is engaged in the production of articles mentioned in the tariff schedules or not. Division of labor necessarily makes the raw material, the plant, machinery, implements, and supplies of one industry the finished products of other industries. But this point cannot be argued at length here. The manufacturer finds that the high scale of wages in all occupations reflects itself in the cost of construction and repairs, in the cost of power, in all the supplies which he buys, in fact, in all the expenses and costs incident to his manufacture. Such costs amount to a sum *nearly* if not *quite* equivalent to the sum of the labor of the weekly pay rolls of his operatives.

THE WOOLEN MANUFACTURE.

Coming now to the single industry of the wool manufacture, I wish to point out one or two provisions of the bill now before you that I deem seriously injurious to it.

PRESENT DEPRESSION GREATER IN THAT INDUSTRY THAN
IN ANY OTHER.

The present depression in industrial conditions is greater in that manufacture than in any other. It is caused by apprehension as to the effect of the radical reduction of rates that is proposed. Business in woolen goods is practically at a standstill.

EXISTING RATES ARE CUT TWO-THIRDS.

A part of the proposed reduction is nominal, owing to the provision placing wool on the free list. But the existing rates on wool manufactures are in effect cut more than two-thirds. It would therefore be necessary that more than three times the current importations of woolen and worsted goods should be entered at the custom-houses in order to produce the revenue now realized, with a resulting displacement of an equivalent amount of goods of home manufacture. The proposed rates on woolen manufactures are *thirty per cent* lower than those imposed by the Wilson Tariff of 1894, which was so disastrous to the industry.

In view of the greatly increased scale of wages and lessened hours of labor that have taken place since 1894 in this country, it would not be possible for such unprecedented reduction of rates as is proposed to be unattended with grave disaster.

UNNECESSARY CLOSING OF PLANTS PREVENTED BY
RESULTING LOSS.

The textile manufacturers do not and will not close their mills, impair the efficiency of their working organization, and discharge their trained operatives, except under great stress. To do so would result in the destruction of their good will and the reputation of their product. But if they cannot operate their mills profitably, the inexorable laws of business, more powerful than any legal enactments, will compel curtailment or suspension.

DANGER ATTENDING SUBSTITUTION OF AD VALOREM RATES.

In the bill before you ad valorem rates have been substituted for specific and compound rates imposed by the existing law. I understand this substitution to be irrevocable. Permit me, however, to direct your attention to the danger of such substitution and to suggest that it necessitates the most careful consideration of full ad valorem rates to safeguard the industry. It opens the door wide to undervaluation and fraud — offences which have always been difficult to detect and impossible to prevent. It is evident even to the untrained mathematician that ad valorem rates subject the American manufacturer to the consequences of fluctuations abroad. Every change in the ratio between the cost of the raw material and the selling price of the finished product must necessarily raise or lower the amount of duty and affect its application to the labor and other conversion cost of those products. The duty is levied upon the sum of the cost of raw material, the conversion cost, and the selling cost and profit of the foreign manufacturer — that is, on the export price of the goods. If the price of the raw material declines, the duty declines automatically. The ratio of the conversion cost to the total cost of goods is higher in this country than it is abroad, and since it increases as the price of raw material declines, a fixed ad valorem duty becomes, so far as the American manufacturer is concerned, a highly variable rate, and a source of vexation, frequently a bar upon his ability to compete on fair terms with the foreign rival.

I cannot emphasize too strongly the danger and unfairness of determining the percentage of duty to be applied with reference to importations under the present law as such imports represent a value far in excess of the average value of the foreign goods which can be imported under the reduced rates proposed.

I must also most emphatically point out the fact that no reliable estimate can be made of either the volume of future importations, or the average value of such importations, and without such knowledge neither the amount of duty collectible nor the average rate can be determined.

DANGEROUS INNOVATION AND CHANGE OF CLASSIFICATION
OF PRODUCTS PROPOSED.

A change of great significance and danger is proposed in the designation of yarns and fabrics which are to pay duty as woollen goods. The phrase "wholly or in chief value of wool" is to be substituted for the words "wholly or in part of wool," in the existing law. There are many reasons why that change should not be made.

FIRST: THE LAW HAS BEEN LONG ESTABLISHED.

It is surely something in favor of the rule now in force that it has been that of every tariff law for more than fifty years, beginning with the Morrill tariff of 1861.

SECOND: LAW SHOULD BE SIMPLE AND EASY OF OPERATION.

It is of great importance that a tariff law, or any law, should be as clear and simple in its language as possible. This is necessary to avoid controversy between importers and the government, with delay resulting from the necessity of appeal to the courts for a definite interpretation.

THIRD: NO UNNECESSARY CHANGE SHOULD BE MADE.

It is an elementary principle that in framing laws no form of language which has received a definite and settled interpretation by the courts and administrative officers in the customs service should be changed except from imperative necessity. The existing clause has been subjected to all the tests which the most astute lawyers have been able to devise, and any new clause must necessarily run the same gauntlet, with the consequent uncertainty and delay and interference with administrative efficiency.

FOURTH: PROPOSED CHANGE IMPRACTICABLE OF OPERATION.

Although no such doubt were raised, it would be found quite impracticable to administer a law containing the phrase. There is an infinite variety of mixed goods, containing cotton and wool or silk in various proportions. In every case where

it might be possible to raise a doubt whether one or another material is of chief value, it would be necessary to analyze the yarn; in the case of cloth to analyze perhaps more than one kind of yarn; and to inquire into the market price of each kind of yarn in the place or places in Europe where it was spun — ordinarily not where the cloth was woven — and all this, not to establish a general rule, but to ascertain the proper duty to be assessed on a single article. This is taxing human knowledge beyond its capacity.

That so vague a rule of classification would be most unjust to domestic manufacturers is evident at a glance. Their rivals abroad would be led to produce goods just within the limit that would enable them to enter their fabrics as cotton, but when the goods were placed on the market they would masquerade as woolen. Thus the effect would be both to injure the home manufacturer and to defraud innocent purchasers at retail.

REMOVAL OF DUTY ON GOODS AT SAME TIME AS THAT ON WOOL UNJUST.

The bill that is before you, if enacted into law in its present shape, would reduce the duty on manufactured goods simultaneously with the abrogation of the duty on wool. I need not point out to you that that would aggravate greatly and needlessly the hardship of manufacturers. It will perhaps be sufficient if I remind you that when the tariff act of 1894 was first drawn there was a similar provision in it, but when finally passed in August it provided for free wool at once, but postponed the reduction of rates on manufactures of wool until January first following. The reasons for such postponement of reduction of the duties on goods until domestic manufacturers should have opportunity to obtain their raw material free and make their goods from it in time to meet the inevitable competition of foreign goods under the new rates were admirably stated by the Hon. William L. Wilson, the author of the bill, and I leave the argument with him. A copy of his remarks is annexed, taken from the

Congressional Record 137, 53d Congress, 2d Session, page 890, January 16, 1894.

I have reason to believe that goods are now being made in foreign countries to be ready for shipment to the United States as soon as a new law goes into effect, thus subjecting the American manufacturer to immediate competition on unequal terms.

A FLAT RATE OF DUTY FOR EACH CLASS OF WOOL MANUFACTURE IS UNFAIR.

I have already called to your attention the dangers attending the substitution of ad valorem for specific and compound rates of duty.

Permit me also to state that these dangers are intensified by the application of a fixed flat rate to each class of manufactures, say tops, yarns, cloths, etc. This is illogical and at variance with the system adopted in fixing rates in other schedules such as "I" and "J." There are also gradations in rates in Schedules "B" and "E."

There is good reason for such graded rates in the schedules referred to, and there is equally good reason for corresponding differences in Schedule K, in the rates which should be assessed on tops, yarns, cloths, etc., of varying degrees of fineness and value. This reason is that no rate of duty can put the American manufacturer upon a competitive basis with the foreign manufacturer which does not make the latter pay to the government an amount at least equivalent to the difference in costs of conversion in this country and abroad. It is an obvious fact that the conversion cost increases both here and abroad in passing from the coarser grades of material or cloth up through the higher grades of more complex and diversified manufacture. Our experience has shown also, and we think it is borne out by the report of the Tariff Board on Schedule K that the English cost of conversion is about one-half of the American cost, *i.e.*, the American cost is at least 100 per cent more than the English cost. The American cost is even greater relatively than that, in some other foreign countries. Furthermore, this differ-

ence in relative costs of conversion exists in the same or greater degree in each added process. In other words, with each increase of \$1 in foreign conversion cost there is an increase of \$2 in American cost. It needs no argument to show, therefore, that the application of the same rate upon all grades of the same kind of manufactures must have a different effect with each change in cost of conversion.

The fallacy in having a single flat rate is due to the fact that whereas the apparent intent is to make the foreign manufacturer pay in duty the difference in dollars and cents between the American and the foreign costs of conversion, the percentage of duty necessary to bring that about must be determined by the ratio between the difference between those costs of conversion and the foreign price, and this ratio must constantly change with each increase in cost because with the same cost of raw material, the cost of conversion constantly increasing, the cost of conversion is constantly becoming a relatively larger and larger factor in the value of goods. A further reason for the constant change in ratio is that the American cost of conversion increases twice as fast as the English cost.

For instance, an *ad valorem* rate of 20 per cent collected on an added \$1 of English cost of conversion would merely add twenty cents to the amount paid by the Englishman, whereas the American manufacturer would have expended \$2 on the same process of manufacture, or eighty cents more than the Englishman's added cost plus the duty. This is true with every class of wool manufactures and if it is the intent to leave American manufacturers on a competitive basis with the foreign manufacturers on anything except the very lowest grades of goods, it is beyond question that there must be a classification of rates with an increase as the processes of manufacture grow more complex and costly.

A LONG ESTABLISHED NATIONAL POLICY TO PROTECT LABOR
SHOULD NOT BE CHANGED IN PART WITHOUT CAREFUL
CONSIDERATION OF ITS EFFECT ON THE WHOLE POLICY.

As part of a general national policy with reference to the safeguarding of our home labor this nation long ago adopted

our contract labor law. To admit the products of the cheaper foreign labor in direct competition with those of our higher paid labor without the imposition of rates of duty which fairly take into consideration the difference in conditions under which both kinds of labor are performed, is certainly a fatal inroad into this settled national policy.

WOOL MANUFACTURE DIFFERENTIATED FROM OTHER INDUSTRIES. SUBJECT TO THE WHIMS OF FASHION.

The wool manufacture has many characteristics that differentiate it not only from other industries, but from other textiles. A very large proportion of its fabrics are used for outer apparel, and both men and women demand constant change in their outside garments. Because of this, ephemeral and constantly changing fashion and taste dictate that the manufacturer shall constantly devise and make novel fabrics and colors in myriad combinations of colors and in varied weights and weaves. It may be said also that there are few, if any, staple fabrics, that is, fabrics that are universally or even generally worn for a continuous period. The variety of the fabrics produced is almost infinite. Because of this, the quantity produced in any single fabric is greatly restricted. The weights for wearing apparel vary from one and one-half ounces per square yard to twenty ounces per square yard. Dyeing and finishing of the cloth ready for the dressmaker and the tailor, subject as it is to the whims of fashion, is really a far more difficult art than that required in any other industry.

Therefore, from the very nature of the materials used, as well as their manufacture, it is more dependent upon the art, originality, skill, and handiwork of the workmen than other industries. This enhances the relative conversion cost. I affirm that there is no industry that has come within the scope of my observation that is so complicated and so difficult to conduct successfully as the wool manufacture.

INDUSTRIAL EFFICIENCY.

In all previous tariff discussions, those contending for the lowest rates of duty have claimed that the efficiency of

American labor was so much greater than that of foreign labor as not only to offset the difference in wages, but to render unnecessary any tariff rates to equalize conversion costs between foreign countries and our own. This view has always been supported by all writers of the Sumner school of so-called political economy.

It is one of life's ironies that by a sudden change in fashion in so-called political economy, we are now found to be inefficient, and are told by new apostles of efficiency that our inability to compete on even terms with foreign countries in the cotton and wool textile manufacture is because of our inefficiency. One of them has said: "Some of these fellows have got to become efficient or go out." Another has said: "Of course, they will have to get efficient and equally, of course, they have not been efficient because they have not had to be so." Hence, suggestion of opening our ports to foreign competing fabrics to *compel* increased American manufacturing efficiency.

On the other hand, the representatives of labor contend that the wages of labor should not be based upon maximum production, but upon an average production, *i.e.*, earnings of labor should not be gauged upon standards of greatest possible efficiency.

The charge of inefficiency is best refuted by the fact of accomplishment in our textile industries. Again, the fact that in the cotton and wool manufacture we supply our own market and import so small a quantity, is given as the *chief* reason for such change of rates as will give our foreign competitors a *better* opportunity to compete with us.

The facts are that efficiency in the textile is equal to that of other industries, that there is little or no difference between the efficiency of American textile labor and foreign textile labor. There is no machinery or appliance of any kind in use in one country that is not known in another. In these modern days everything that is known to the producing world is common property.

CONCLUSION.

Thus far, in this communication, I have confined myself to considerations on which reasonable men, whatever their opinions on the great economic question that has divided public men and political parties ever since the government was founded, might stand on common ground. In concluding these general observations, I wish to make the statement that, assuming wool is to be admitted free of duty, I believe such reductions in duty on wool manufactures can be made as would reasonably satisfy a public demand without serious peril to the industry either as to investments already made or as to its continuous comparative prosperity.

I have already pointed out the dangers of the application of ad valorem rates. It needs no argument to prove that fundamental changes cannot be made in a tariff law without great risk. It is, however, self-evident that no unnecessary risk should be taken. I think very few men realize the smallness of the margin between the successful prosecution of a business and failure.

The importations of manufactures of wool for the fiscal year ended 1912 amounted to \$15,182,600. These importations were so exceptionally small that they should not be taken as a basis of any calculation. For my purpose, I will take the largest importations of any year for the last five years, those in 1910, which show that the importations of manufactures of wool of every name and nature amounted to \$23,049,645. The revenue received from these importations was \$20,771,964. Under an average duty of 35 per cent to secure the same amount of revenue, the importations would have to be increased from \$23,049,654 to practically \$60,000,000 of foreign value, or more than two and one-half times. Such an immense increase would not be possible within a reasonable time, both from inability of foreign manufacturers to supply, and the American purchasing power to buy. But the beginning of increased importations, owing to the change, would have a most depressing effect on the market for home manufactures. If the rates were increased over those of House Bill 3321 by 15 per

cent, the additional duty based on the importations of 1910 would amount to only about \$3,457,448. When we consider this sum or any other sum in connection with the tariff on woolen goods and compare it with the magnitude of the business, the vast number of people employed directly or indirectly in its conduct and its inter-relations with all other industries contributing to the national prosperity, how small the sum appears as a reasonable safeguard to one of the greatest industries of our country.

Even with an increase of 15 per cent in the rates over those of the bill under discussion, the reduction of duties on wool manufactures for those of the existing law would probably exceed 50 per cent.

It seems to me that reason and the ordinary rules of life put the burden on those who propose changes in long established policies of furnishing the evidence to justify them. I do not think the evidence thus far produced warrants the contemplated changes.

MR. FORSTMANN'S ADDRESS.

Mr. Forstmann emphasized the desire of manufacturers for an interval of some months between the taking effect of the free wool or the new wool duties and the taking effect of the duties on finished goods. He suggested that free wool or reduced wool duties be made operative three months after the passage of the tariff bill and the reduced duties on goods three months later. Mr. Forstmann presented a statement of rates of duty on woolen products which, in his opinion, were essential to the maintenance of the industry. He asked for higher rates on all finished goods and higher rates particularly on high-cost goods than the bill provided. Mr. Forstmann expressed himself as favoring a reasonable duty on raw wool.

His address as prepared and presented to the Committee was as follows :

As a manufacturer of woolen and worsted yarns and fabrics, which industry in the United States, at the time of

the last census (1909), represented a capital investment of \$430,579,000 and an annual product of \$435,979,000, and employed 175,176 persons with an annual payroll of \$82,524,000, I wish to enter a most vigorous protest against the rates on woolen manufactures contained in paragraphs 295, 296, 297, and 299 of the Underwood tariff bill.

The figures mentioned above for woolen and worsted mills and their employees give only a partial idea of the vast interests affected by any change in the tariff. The mill workers represent from three to four times as many people dependent upon their earnings for support and each mill is the center of a community composed of minor interests — real estate owners, shop-keepers, building trades, etc. — all of whom look to the mills and their employees for a livelihood and feel keenly any diminution in the earning power of the latter.

DUTIES UNBALANCED.

The various duties of the woolen schedule of the Underwood bill are extremely ill-balanced and absolutely inadequate and constitute a menace not merely to the prosperity but also to the very existence of woolen manufacturing in the United States.

The question of a duty on wool is one which I feel must be left to Congress to decide properly, in full realization of its responsibility to the American wool-growing industry.

The provision of a single ad valorem rate each for yarns, cloths, and dress goods will destroy important parts of the industry and deprive the Government of proper revenue. The Gorman-Wilson law enacted twenty years ago provided for two classes of yarns and two classes of fabrics. Since that time there has been a steady and wonderful growth in fine woolen and worsted manufactures, until to-day yarns and fabrics can be and are manufactured in the United States as fine as any made in any country. Instead of abandoning, therefore, the policy hitherto pursued in all tariffs and making a single flat rate on woolen manufactures, the principle of putting higher rates on finer manufactures

should be developed still further in order to meet the existing conditions and requirements of American production.

SLIDING SCALE JUSTIFIABLE.

A sliding scale, with higher ad valorem rates on the finer products, is justifiable for the double reason that it costs more to manufacture fine yarns and goods in America (as compared with cheaper goods) than it does in Europe, and also because fine yarns and fabrics are used only in the apparel of the well-to-do and therefore fall into the category of luxuries and are properly taxable as such. Although the Ways and Means Committee of the House recognized the truth of this contention with regard to many other schedules, it absolutely ignored it in the wool schedule.

DUTY ON FINISHED GOODS BELOW WILSON BILL RATE.

The duty proposed on finished goods — 35 per cent ad valorem — is far below the 40 and 50 per cent of the Gorman-Wilson law of 1894, which proved disastrous to this as to other American industries. Since 1894 wages in American woolen mills have advanced from 40 to 50 per cent. There has been no corresponding increase in the competing mills of Europe.

Not only are weekly earnings at least twice as great in this industry in America as abroad, but the actual cost of spinning a pound of yarn or weaving a yard of cloth is twice as great here as it is in Europe. This is not only the explicit statement made after careful investigation by the recent Tariff Board, but it is also confirmed by a number of prominent and competent American manufacturers, who formerly managed similar European enterprises. Not only this, but because of the higher general wages the cost of the buildings and machinery of a woolen mill is about 50 per cent greater here than in Great Britain.

UNDERVALUATIONS WOULD REDUCE DUTY TO LESS THAN
30 PER CENT.

A difference so great as this in the cost of conducting business cannot be spanned by a nominal duty of 35 per cent, which because of undervaluation would in practice prove to be less than 30 per cent. The Democratic party is pledged to a downward revision of the tariff, but it was never pledged to such extreme changes as are embodied in the pending bill. The serious crippling of a great national industry and the destruction of parts of it, with the accompanying lack of employment for tens of thousands of workers, and the ensuing harm done to the great number of allied interests dependent for their welfare upon the prosperity of the mills and their employees, are not desired or expected by the American people.

OPPOSES RATES BECOMING OPERATIVE IMMEDIATELY.

I also register a most emphatic protest, as regards the woolen schedule, against paragraph U of Section IV of the Underwood bill, providing for the immediate operation of the law. Ours is a seasonal trade and raw material must be bought and manufactured a long time ahead in order to meet the requirements of our customers. Requirements in raw material cannot be covered overnight, nor can the goods needed to fill the orders received be manufactured in a day. During all the tariff agitation of the past three years, when no one could tell when or in what form the new tariff bill would be passed, manufacturers have been confronted with the necessity of curtailing or wholly ceasing production, or of continuing to buy material and to manufacture the same on the old basis, relying upon the time honored custom hitherto followed by all political parties of allowing ample time to elapse between the enactment of the law and its operation. This is a simple and just demand, based upon commercial necessity, and has nothing whatever to do with tariff policy.

NO REASON WHY THIS REQUEST SHOULD NOT BE GRANTED.

There is no conceivable reason why this request should not be granted. The refusal to do so would be a direct violation of the Democratic party's promise to avoid all sudden and radical legislation affecting business interests. If the provision which makes the law immediately operative should be adopted, it will mean a sudden depreciation in values of all stocks — whether in the hands of manufacturers, jobbers or retailers — and will bring about a disastrous period of readjustment, with sudden and violent alteration in the amount of production and hours of employment, working great hardship to the operatives by lessening their earnings or entirely throwing them out of work.

In view of the above facts I respectfully ask that your committee so modify the woolen schedule of this bill that it may not belie the platform promises of the Democratic party and the repeated assurances of President Wilson that in the process of readjustment of the tariff law no legitimate American industry shall be injured. I append a statement of amendments embodying the changes in the Underwood bill proposed by me. The rates suggested contain no element of protection and represent only such duties as would tend to equalize conditions here and abroad and barely compensate the American manufacturer for the excess in manufacturing cost in the United States over that of Europe. Even under these rates the keenest competition would prevail in all classes of woolen and worsted manufacturing and none but the most efficient and up-to-date mills could survive.

PROPOSED AMENDMENTS TO NEW UNDERWOOD BILL.

Amend paragraph 295, lines 2-7, page 74, as follows :

Combed wool or tops made wholly or in part of wool or hair, 15 per centum ad valorem.

Roving or roping, made wholly or in part of wool or camel's hair and other wool and hair which has been advanced in any manner or by any process of manufacture beyond the washed,

scoured, and combed condition and not specially provided for in this section, 20 per centum ad valorem.

Amend paragraph 296, lines 8-9, page 74, as follows :

Carded woolen yarns, made wholly or in chief value of wool, if not exceeding 33 cut, 20 per centum ad valorem, and if exceeding 33 cut, 25 per centum ad valorem.

Worsted yarn, made wholly or in chief value of wool, shall be subject to the following rates of duty : Nos. 1 to 14 inclusive, 25 per centum ad valorem ; Nos. 15 to 29 inclusive, 30 per centum ad valorem ; Nos. 30 to 44 inclusive, 35 per centum ad valorem ; Nos. 45 to 59 inclusive, 40 per centum ad valorem ; Nos. 60 to 74 inclusive, 45 per centum ad valorem ; Nos. 75 and over, 50 per centum ad valorem.

Hard-twisted worsted yarns, not singed or gassed, shall be subject to the duty provided in the foregoing paragraph for the respective number of yarn, and in addition thereto a duty of 10 per centum ad valorem ; if singed or gassed, they shall be subject to the duty provided in the foregoing paragraph for the respective number of yarn and in addition thereto a duty of 20 per centum ad valorem.

Amend and combine paragraphs 297 and 299, lines 15-18, page 74, to read as follows :

On cloths, knit fabrics, felts not woven, women's and children's dress goods, coat linings, Italian cloths, bunting and all manufactures of every description made, by any process, wholly or in chief value of wool, not specially provided for in this section, valued at not more than 50 cents per pound, 45 per centum ad valorem ; valued at above 50 cents per pound and not above 70 cents per pound, 50 per centum ad valorem ; valued at above 70 cents per pound and not above 90 cents per pound, 55 per centum ad valorem ; valued at above 90 cents per pound, 60 per centum ad valorem.

The above proposed rates are based on free wool, as provided for in the Underwood bill. Should Congress finally decide to place a duty on wool, additional compensatory rates would have to be added to the above rates as follows :

On tops, 80 per cent ; yarns, 70 per cent ; cloths, dress goods, 60 per cent, of the duty on wool.

TABULATED RESUMÉ OF PROPOSED AMENDMENTS.

For simplicity's sake I give below a tabular resumé of these proposed amendments, with the rates of the present Underwood bill on the same articles and those of the Wilson bill of 1894 — which although considerably higher than those of the present Underwood bill, especially on finer goods, proved so disastrous to the woolen industry :

	Proposed Rates.	New Underwood Bill.	Wilson Bill 1894.
Greasy wool, washed wool, scoured wool	Free	Free	Free
Noils, waste, *rags, shoddy	"	"	15 ^c / _o
Top waste, etc.	"	"	15 ^c / _o
Tops.....	15 [%] / _o	15 [%] / _o	20 [%] / _o
Rovings	20 [%] / _o	15 ^c / _o	20 [%] / _o
Yarns, woolen, single or twist — gray, bleached or colored :		20 [%] / _o	30 ^c / _o , not over 40c per lb. 40 [%] / _o , over 40c per lb.
Not over 33 cut.....	20 ^c / _o		
Over 33 cut	25 [%] / _o		
Yarns, worsted, single or twist — gray, bleached or colored :		20 [%] / _o	30 [%] / _o , not over 40c per lb. 40 [%] / _o , over 40c per lb.
Not over 15s.....	25 [%] / _o		
15s to 30s	30 [%] / _o		
30s to 45s	35 [%] / _o		
45s to 60s	40 [%] / _o		
60s to 75s	45 [%] / _o		
Over 75s	50 [%] / _o		
Worsted yarns, hard twisted, same duty as above, according to number, plus extra duty of.....	10 [%] / _o	Same as other yarns	New industry used only in very fine goods and silk; not provided for in Wilson bill.
Worsted yarns, hard twisted and singed, same duty as above according to number, plus extra duty of.....	20 [%] / _o		
Cloths and Dress Goods :		35 [%] / _o	40 [%] / _o , not over 50c per lb. 50 [%] / _o , over 50c per lb.
Foreign value not over 50c per lb.	45 [%] / _o		
" " 50c to 70c " "	50 [%] / _o		
" " 70c to 90c " "	55 [%] / _o		
" " over 90c " "	60 [%] / _o		

* Rags free under Wilson bill.

PROPOSED AMENDMENTS IN UNDERWOOD BILL REGARDING
TIME OF OPERATION OF LAW.

Insert after paragraph 318, after line 17, page 77, the following :

The rates provided in this schedule shall take effect on the first day of the seventh month following the passage of the Act.

Amend paragraphs 653 and 654, lines 19-26, page 129, by adding to each paragraph, on lines 21 and 26 respectively, the following words :

. . . but the exemption from duty of these articles shall not take effect until the first day of the fourth month after the passage of the Act.

THE TARIFF AND THE WOOLEN INDUSTRY.

By THOMAS WALKER PAGE.

(A Member of the Recent Tariff Board.)

(This article was prepared not for publication, but for use before a club interested in economics at the University where it was read. We are glad to have obtained the consent of Professor Page to present the article in the Bulletin. It is of great interest to all those associated with the industry as an able, well-considered presentation of the subject from a Democrat who had participated in the inquiry of the Tariff Board. Of course it is possible that manufacturers would not concur in all of the conclusions of Professor Page, but the Bulletin, on behalf of the Association, welcomes the article for its manifest sincerity. Only good can result from a free and fair discussion of the subject along the lines followed by this scholarly writer. — *Editor of the Bulletin.*)

EVER since 1816 the rate of our import duties on woolen goods has been based on two suppositions: first, that the manufacture of wool is an industry essential to the welfare of this country; and second, that foreign manufacturers have certain advantages that render it impossible for our manufacturers to compete with them on equal terms.

No less an advocate of free trade than Thomas Jefferson admitted and gave currency to the first of these suppositions. In a letter to Benjamin Austin dated January 9, 1816, he wrote:

“ . . . You tell me I am quoted by those who wish to continue our dependence on England for manufactures. There was a time when I might have been so quoted with more candor, but within the thirty years which have since elapsed how are circumstances changed! . . . We have experienced what we did not then believe, that there exists both profligacy and power enough to exclude us from the field of interchange with other nations: that to be inde-

pendent for the comforts of life we must fabricate them ourselves. We must now place the manufacturer by the side of the agriculturist. . . . He therefore who is now against domestic manufacture must be for reducing us to dependence on that foreign nation, or to be clothed in skins, and to live like wild beasts in dens and caverns. I am not one of these ; experience has taught me that manufactures are now as necessary to our independence as to our comfort. . . .”

Of course, since the date of this letter conditions have greatly changed. It may even be doubted whether there now exist “both profligacy and power enough to exclude us from the field of interchange with other nations;” and even if they do exist, no country can afford to maintain an industrial policy based on the very remote possibility of a complete cessation of foreign trade. Nevertheless, Jefferson’s belief that the cloth industry should be maintained still prevails, prevails indeed so widely that no political party would knowingly adopt measures leading to the overthrow of wool manufacturing. It is not necessary here to seek the grounds for the continuance of this belief. An obvious, and for the present a sufficient, explanation of it lies in the enormous growth the industry has attained and the wide and varied interests concerned in its prosperity. Its employees are reckoned in the hundreds of thousands, the invested capital in the hundreds of millions, and the annual output of the factories working in whole or in part with wool is valued at approximately three-quarters of a billion of dollars. If serious disaster should come upon such an industry, no field of business in the country could escape its effects. Men may indeed disagree as to the wisdom of having artificially fostered the industry to such dimensions : but when the growth is there, and strikes its roots down to the vitals of public welfare, it cannot be cut off without danger to business life.

The question now before the country therefore is, as it has been for a hundred years, not whether wool manufacturing merits protection, but rather whether it needs protection, and if so, how much. There is a widespread belief that the duties now are unreasonably high. The present Congress is

pledged to reduce them, but to reduce them only to the point that will provide a revenue and allow fair and equal competition in our markets between foreign and domestic manufacturers, and not to a point that would destroy the industry. To ascertain this point it is necessary to know what advantage, if any, foreigners have over Americans, and whether this advantage can be approximately measured in terms of money and the duties fixed accordingly.

Space is lacking in an article like this for a discussion of the numerous branches of the industry, and attention must be confined to the manufacture of cloth, dress goods, and similar articles of wearing apparel. This is, however, the most important branch of the industry; and the conditions, furthermore, that prevail in it prevail also in the main, *mutatis mutandis*, in the other branches.

It is hardly necessary here to do more than call attention to the difference in the prices paid by manufacturers for their wool in this country and abroad. The higher price in America, due to our wool duties, would alone suffice to shut out American manufacturers from neutral markets. But in the home market they are indemnified by compensatory duties on foreign manufactures. All imports made in whole or in part of wool must pay two duties: one is intended to offset the duty on the raw material, the other, to afford protection to the manufacturer. At present the compensatory duties in very many cases are too high, and are responsible for much of the popular outcry against "Schedule K" — that schedule of the tariff that deals with wool and manufactures of wool. It will never be possible to adjust these duties with strict accuracy: but assuming that it were done with at least approximate fairness, or else — a more plausible assumption — that our wool duties were repealed, and American and foreign manufacturers thus put on an equal footing in the cost of their raw material, wherein is the American still left at a disadvantage?

The first thing that the manufacturer has to reckon with is the cost of building and equipping his mill. It has been long asserted that this cost is higher in the United States

than in Europe; but a trustworthy comparison was impossible until the Tariff Board engaged leading mill architects here and in England to prepare detailed specifications for mills of the same size, construction, and capacity in the two countries. These specifications show that in the case of a typical worsted weaving mill of a hundred looms designed to make men's suitings and dress goods for women and children the cost when ready for work is 43 per cent higher in America than it is in England. In the case of a similarly typical woolen mill, which both weaves and spins, the American cost is 49 per cent higher than the English; while the difference goes up to 67 per cent for a worsted spinning mill. A part of this difference is due to the higher price paid for machinery in this country; and this, in turn, is caused in large measure by the necessity of buying the machinery abroad. It is true that about three-fourths of the looms, and an even larger part of the cards and spinning mules in the old type of woolen mill, are made in America, but no less than 87 per cent of all other machinery in the industry is manufactured abroad. A duty of 45 per cent on such machinery, packing and shipping charges, freight, and the cost of erection make the total cost of his machinery about 75 per cent higher to an American manufacturer than to his English competitor. It is obvious that the industry would be spared a portion of this initial expenditure by a reduction in the other schedules of the tariff, but many items of it would not be much affected by such a measure. Building, for example, which is usually a larger item of cost than manufacturing machinery, requires a much greater outlay in this country than abroad, and this outlay is little influenced by tariff rates. In specific figures the costs in England and America respectively are: for a woolen mill, \$342,259 and \$506,941; for a preparing and combing plant, \$163,003 and \$200,158; for a worsted spinning plant \$125,569 and \$203,996; and for a worsted weaving plant \$233,379 and \$333,678.

These figures show that the American clothmaker is handicapped at the start. Can he overcome the disadvantage by

cutting down any of his subsequent costs below those of his foreign competitor? It is obvious that this cannot be done in the purchase of his raw material. Even the total repeal of our wool duties would do no more than put him on an equal footing with foreign manufacturers in procuring his stock. The same is true with regard to other materials used in the industry, such as soap, oils, dyes, and chemicals, materials that can now usually be bought in Europe more cheaply than in this country. Therefore, if the American manufacturer is to compete successfully in making woolen goods he must be able to reduce either his general expenses or the cost of his labor below the point at which they stand abroad.

Without entering upon a technical and detailed analysis of general expenses, it is possible to compare the significant items as they appear in the United States and in foreign countries. The first group is commonly known as "overhead charges;" and in the list of these perhaps the most important consists of salaries paid to executive officers, clerks, and superintendents. The rate of such salaries varies, of course, in different mills, but on the whole it is materially higher here than it is abroad. Occasionally it happens in this industry as in others that salaries are named for the chief officials that are out of proportion to the prevailing rate and so high as to disguise the real profits of the business. Sometimes, on the other hand, nominal salaries are abnormally low, and the officials find their real remuneration in their share of the profits of the enterprise. These, however, are uncommon practices, and by no means detract from the truth of the statement that administrative ability commands a higher rate of compensation in this country than in Europe.

A higher rate likewise prevails for the labor and equipment of lower classes of workmen, who are as necessary as clerks and superintendents, though like them they are not directly engaged in manufacturing processes. Such men are warehousemen, engineers, carpenters, firemen, machinists, teamsters, watchmen and many others. Their wages depend not upon special conditions in the woolen industry, but upon the general condition of American industry as a whole, and are

higher than they are abroad. Therefore to reduce this portion of general expense to the European level such labor must be made to produce more in America than it does in Europe. There are two obstacles to this. The first lies in the fact that it is Europeans and not natives who perform most of this labor in our mills. Even of the supervisory and clerical classes in the industry 57 per cent are foreign born, while nearly three-fourths of the mechanical and miscellaneous laborers are immigrants. The second obstacle consists of the migratory habits of these workmen. A change from one occupation to another and from one place to another has always been easier and incomparably more frequent in this country than elsewhere. The facility with which such a change can be made enables the laborer to study his own advantage or at any rate his preferences. Beneficial, however, as it may be to the individual worker, it is hurtful to the industry which must be constantly training new men. In seeking therefore to increase the effectiveness of his clerical or his general labor beyond the European standard, the American employer cannot rely on any superior efficiency of the individual laborer. His only resource must be found in his ability to organize and direct the labor that he has better than his European competitor can do, and this ability our wool manufacturers have not thus far displayed.

Another important element of general expense is the cost of the power, heat, and light needed to operate a factory. Probably no item of cost differs more from mill to mill than this one. Indeed, the time has been when cheapness and sufficiency of power was the prime factor in determining the location of an industry. It is still strong, but the combined influence of other factors is stronger. The available labor supply, transportation facilities, market conditions, etc., explain the location of mills in many places where operating expenses are high. It is true that not a few mills are found in widely scattered rural communities where the price of fuel is low and the cost of water power almost negligible, but such mills are small and unimportant. Though the industry has attained considerable growth at a few interior points, such as

Cleveland, Ohio, by far the greater part of it still remains where it was first established, that is in the North Atlantic States; and the centers where it exists offer no advantages in the matter of light, heat, and power over competing centers abroad.

Yet another heavy element of general expense consists of what are commonly called fixed charges. The most important of these are taxes, insurance, and depreciation. It is difficult to compare with accuracy the burden of taxation on the industry in different countries, because systems of assessment and collection differ too widely. On the whole, however, the American manufacturer seems to have the advantage. But his advantage in this particular is more than offset by the other charges; for even when the rates of insurance and depreciation are the same as abroad, the greater cost of his plant and materials raises their amount. Maintenance and repairs likewise cost more in America, partly because materials and general labor are more expensive, partly because manufacturing labor in this country is less skilful and therefore more destructive, and partly because the machinery is pre-vailingly of foreign make and therefore the replacement of parts is difficult and the skill is scarce for quick and smooth readjustment and repair.

The remaining items of general expense are inconsiderable in comparison with those that have been mentioned. Office supplies, occasional litigation costs, membership dues and other expenses connected with associations, bonuses, and premiums to workmen, etc., when averaged through a number of years make a small fraction of the total cost of production, and this fraction does not differ materially in modern industrial countries.

It is obvious that general expense as a whole is an important part of manufacturing cost. Its ratio to the total cost differs, of course, in different mills, and it differs also with different products. Always, however, it is so large an element that a material saving in it by an American manufacturer would go far to offset the advantage of his European competitors in cheap labor and lower costs of building,

equipment, and materials. To effect such a saving is naturally the constant endeavor of every intelligent business man. But to succeed in this endeavor a review of the items of general expense shows that the American can rely on no natural advantage over foreigners; that in most items he is at a serious disadvantage, so that in order to reduce his expenses to the European level he must show much greater business ability than his foreign competitors. Salaries are higher, therefore he must employ better or fewer salaried officials. Depreciation, maintenance, and repairs are more costly, therefore he must take better care of his plant and get more work out of it. General laborers are more highly paid, and as individuals not more efficient than abroad, therefore through his genius for organization and control he must make them produce more.

In his effort to increase the output of his plant and his labor, and thus to reduce his general expense by distributing it over a greater bulk of products, the American now encounters a serious obstacle. This obstacle is the limitation of his market. Any manufacturer who seeks to run his mill to its full capacity must be able to dispose of his products when they are finished; and the European has a better prospect of doing this than the American, because the European enjoys a much wider market. So long as the domestic price of raw wool is kept higher than the foreign price, the American manufacturer cannot sell his goods in the neutral markets of the world, but will be necessarily limited to his own country. Therefore in the design, the finish, and the quality of his cloth the American weaver must forecast the American demand. If his forecast is correct, and his designs prove popular, he can run his mill to its full capacity. But tastes and fashions are capricious and subject to sudden and violent changes. Consequently, his products frequently fail to catch the popular fancy, and his season's orders are so small that he is forced to reduce his output, while his general expenses remain practically undiminished. With the European it is different. His goods are vented in many lands, and when they fail to please in the market for which they were specially

intended, there is still an excellent chance of selling them to advantage elsewhere.

It might be supposed that since the American is limited to his home market, he should at least be able to foretell the demand there better than a foreigner. But even here, paradoxical as it seems, the European has the advantage, for the reason that it is from Europe that America takes her styles and fashions in cloth and apparel. It is notorious that the better grades of domestic fabrics are frequently sold as English, French, or German. Indeed, the partiality for imported woollen goods is in itself a powerful handicap to American manufacturers. Nor, it may be observed, is it altogether without justification: for in imparting certain artistic qualities to their goods the producers of the Old World lead those of the New. Numerous attempts have been made to overcome this by employing European pattern-makers and designers; but they have seldom succeeded, for American business methods, habits of work, and philosophy of success look rather to bulk of production than to artistic finish. Such methods, habits, and philosophy are well adapted to industries that produce goods in which only mechanical qualities count, and which may therefore be "standardized;" and they go far to explain our success in the steel industry and many other fields. But they are not adapted to the manufacture of wool, so long as men and women aim at artistic effect and individuality in their dress.

For these reasons it often happens that the very effort to reduce the cost of production by increasing output brings its own failure. It is for these reasons also that the most consistently prosperous mills in this country have been those making "standardized" fabrics, such as uniform cloth, certain well-known serges, etc. These have a steady market, and the manufacturer can base the capacity of his mill on a fairly definite demand for his products. On the other hand, the manufacturer of fancy worsteds, most varieties of dress goods, and many other fabrics and commodities of wool has a market liable to wide and capricious fluctuations, and must frequently alter the extent and direction of his operations

with little reference to fixed charges and other items of general expense.

It appears, then, that the important elements of general expense weigh more heavily upon the American than upon the foreign manufacturer of woolen goods. At the same time it cannot be denied that in all countries the amount of this expense depends in large measure upon the efficiency of the man that manages the business. To compete successfully in an open market, therefore, the American needs only to show genius that is not possessed by the Scotchman, the Englishman, the Frenchman, or the German. To this statement, however, the manufacturers make the obvious and sufficient retort that as yet the rôle of the superman has become possible on the stage only of the theatre and not of business.

The greatest single element in the cost of turning wool into cloth is the wages of manufacturing labor. It is a matter of common knowledge that the rate of such wages, whether based on time or on output, is higher in the United States than in any other industrial country. This fact has been widely advertised by those that advocate tariff protection to American manufacturers. It has, however, become a matter of almost equally common knowledge that high wages do not necessarily mean a high labor cost. On the contrary, as was pointed out by the Tariff Board, in the woolen industry, as in others, it is frequently found that high wages and low labor costs go together. If the natural conditions are more favorable, if the equipment and machinery are superior, if the organization and management are more competent, particularly if the labor itself is more efficient, an industry readily affords higher wages. But it is only when these conditions are fulfilled that higher wages are not synonymous with higher costs.

Now, it is obvious from what has been said that in natural conditions, equipment and machinery for this particular industry America has no advantage over foreign countries. This fact is commonly obscured in the public mind by our brilliant achievements in other fields. In many of the metal

industries, the manufacture of agricultural machinery, of heating apparatus, of machine tools, of many varieties of plumbers' supplies, of numerous adaptations of the steam, electric, and gasoline engine; also in many devices and forms of equipment for mining and lumbering; even in some branches of the cotton industry, as the making and application of automatic looms; in railway appliances; and in numerous other fields that readily occur to the student of industrial conditions, American ingenuity, genius for organization, and energy have put us in the lead of the nations. But close observation will disclose that our primacy has usually been due to one or more of certain special conditions. In the first place, bountiful natural resources have sometimes fostered development and attracted a concentration of talent and energy. Or again, in certain new industries Americans have seized the advantage of an early start that has enabled them to outstrip competition. Or, to illustrate yet further, the products of some industries, as for example, ready made clothing, long found their best and sometimes almost their only market in the United States. No such condition existed for the manufacture of cloth. Every aid and every incentive to development has been as strong abroad as with us. In consequence, important inventions and effective betterments of organization in Europe have kept pace with or outstripped development in America.

If then our manufacturing labor in this industry is to be more productive than it is abroad, it must be because the labor itself is of better quality, more efficient, and more skillful. In fact, however, the reverse is true. In our worsted and woolen mills approximately two-thirds of such labor is rendered by immigrants, the majority of whom have had no previous training in the industry. Even of the supervisory classes native Americans compose less than a half. Whatever their nationality, it is a very small part of the operatives that bring to their work when they are hired any experience in the industry or special training for it. This fact in itself would not be serious if they remained at the work long enough to acquire and apply the necessary skill; but unfor-

unately this class of labor in America is curiously unstable. Widespread, old, and well established as is the industry, less than half the operatives it now employs have been in it for five years, less than five-sixths have been in it for as long as one year. Nor is this the worst. For the bulk of the laborers are not only new to the industry, they are also singularly prone to wander from place to place, from mill to mill, and to desert this industry altogether for some quite different one. Less than 30 per cent of them at any particular date have been working in the same mill for five years, and less than three-fourths of them have completed the first year. In the important centers of the industry, therefore, the employers are constantly engaged in breaking in new and untrained workers. In Europe the situation is quite different. Change of occupation or of place of employment is comparatively rare, and it is by no means uncommon to find that the same occupations have passed from parent to child for several generations.

Many things contribute to the difference in this regard between the Old World and the New. It will suffice here, however, to mention only two causes of it. The first is found in the relative weakness in this country of home and neighborhood ties among the laborers. Two-thirds of them are immigrants, who have once for all severed their home connections, and who for the most part are strangers to their employers, to their fellow workmen, and to the communities where they live. They form little local attachment, seldom develop a feeling of personal loyalty to business officials, and become interested in the growth and success of the industry where they work only so far as their wages may be affected. To induce them to give up their work, therefore, it requires but a very slight and temporary feeling of dissatisfaction with conditions where they are or an equally slight expectation of better conditions elsewhere. The second cause of our unstable labor supply is found in the great inequality in the remuneration of labor in different American industries. For reasons mentioned above some of our industries are more prosperous than others; they afford greater profits and higher wages,

and can more than hold their own in competition with the world. The woollen industry is not one of these. It appears to have no single advantage that is not enjoyed in equal or greater degree by the same industry abroad, and it lacks many important advantages possessed by other industries at home. Its development to its present dimensions, indeed even its existence at all in some branches, seems to have rested on the continuance of tariff protection. Naturally, the best elements of American labor find their way into those industries that are built on a safer foundation; and the wool manufacturers, who cannot compete for such labor, must recruit their supply in large measure from the ignorant and unskilled.

This sketch of the conditions now prevalent shows that we cannot make cloth in this country as cheaply as it can be made abroad. The question then arises: how much does the difference amount to on a yard or a pound of cloth?

To ascertain this difference in 1911 the Tariff Board conducted in this country and abroad the most extensive and careful investigation of textile manufacturing costs that had ever been undertaken. It reported that under normal working conditions the cost of turning wool into tops and tops into yarn was respectively 80 per cent and 100 per cent higher in America than in the chief competing countries. This does not mean, of course, 80 or 100 per cent of the whole value of the tops and yarn, but merely of the foreign cost of making them. The difference in the cost of turning yarn into cloth varies widely because of the great diversity of wool fabrics in composition, construction, and finish. It was found that in some cases the American cost of weaving and finishing was as much as 170 per cent higher than the foreign cost; sometimes the difference was not more than 60 per cent.

To show the real significance of these percentages the Tariff Board procured many samples of typical American made fabrics in common use; ascertained the cost of making them in the mills where they were actually produced, and with the aid of accountants and textile experts worked out

the cost of producing similar fabrics in other American mills and abroad. In this way it was possible to show the specific difference between foreign and domestic costs. For no two fabrics was the difference the same ; it varied from about five and a half cents a yard in the case of a brilliantine to about fifty-four and a half cents in the case of a silk mixed worsted. On the brilliantine the difference in cost was 31 per cent of the normal foreign selling price ; on the silk mixed worsted it was 37 per cent. These figures express the rate of ad valorem duties that would aim just to offset the advantages enjoyed by foreign makers of these two fabrics. Ad valorem rates of a similar character on forty-two samples in the Tariff Board's report, which allow a full comparison of English and American costs, vary all the way from 21 to 45 per cent. On fourteen samples of expensive fabrics made in Germany the ad valorem rates would vary between 21 and 48 per cent. Many of these German fabrics, however, are made to a very limited extent, and some of them are not made at all, in this country.

Since it is obviously impossible to have different duties for each variety of cloth, what single rate should be adopted ? It appears from the Tariff Board's representative list of forty-two fabrics on which it is possible to make a direct comparison of costs between the United States and England, that with free wool and settled conditions a duty of 40 per cent would protect the greater part of the industry as it now exists against English competition. Only three of the forty-two fabrics indicate the need of a slightly higher rate, and this need would be partly met by the cost of transportation from Europe. Neither this rate, nor for that matter any other rate less than actual prohibition, would protect American producers against the "dumping" of foreign products in this country at a sacrifice. Nor would this rate be protective against prices lower than those prevailing when the investigation was made. On the other hand, it should be observed that the rate of 40 per cent is based on the supposition that other schedules of the tariff remain unchanged. This, however, is most unlikely ; and a reduction in the duties he must

now pay for machinery, materials, etc., in lowering the costs of the American manufacturer, would likewise lower the rate that would give him protection.

As the rate is reduced from 40 per cent, the variety of fabrics is increased that can be imported to advantage. Such fabrics are in the main those with a construction and finish of such nature as to require a high labor cost in proportion to the cost of material. Thus at 30 per cent twenty-two of the fabrics listed, and at 20 per cent all of them, could be procured from abroad more cheaply than at home. Any rate between 20 and 40 per cent would be a duty "for revenue, with incidental protection" to a portion of the industry.

This industry more than any other presents a clear cut issue between the advocates of protection and the advocates of free trade. It is as old as the nation itself; it has been highly protected for many generations; it has attained well-nigh colossal dimensions and has probably reached the limit of the possibilities in competition with Europe. In this competition, however, it has not "made good." The difficulties in its way have been humanly insuperable. It is likely that it never can make good, for the obstacles to cheap production set forth above can be removed only by changes in American life that few wish for and none expect. True, it now supplies practically the whole American demand, but it does so at a price much higher than would be paid if the demand were met in Europe. The permanent retention of this industry, therefore, means the permanent retention of higher prices for certain necessities of life. Manufacturers themselves freely admit this. It remains then for Congress to determine whether the industry is worth to the country the price that must be paid for it. In reaching a conclusion the party in power will be guided, in this as in other matters, not merely by economic considerations but also by more general considerations of public policy, considerations that were emphasized a hundred years ago by the Prophet of Democracy, Thomas Jefferson.

STATEMENT REGARDING NEW UNDERWOOD
TARIFF BILL WITH SPECIAL REFERENCE
TO SCHEDULE K.

BY JULIUS FORSTMANN.

WITH regard to the wool schedule of the new tariff bill which has been introduced into Congress I wish to make the following statement:

First of all, without wishing in any way to put my own personality into the foreground, but simply in order to show why I consider myself qualified to speak with authority on the question of the wool tariff, I would state the following facts:

I have all my life been engaged in wool manufacturing, both here and abroad. I have been and am still interested in large mills in Europe as well as in the United States. For the last ten years I have been in the United States, and before that I was for ten years managing partner of one of the leading German woolen mills, founded by my great-grandfather in 1803 and one which has done business with the United States since 1825. Since I have been permanently in America I have personally established and had the sole management of a mill which is considered the leader in its branch. The successful establishment and development of our mill has shown that it is possible to produce in this country goods as fine as any produced anywhere in the world and our fabrics are recognized as such. The very people who said at the outset that such goods could not be produced in this country have been among the first to recognize that the seemingly impossible had been accomplished. But it has all had to be done subject to the higher standard of American values, which has increased throughout the productive cost.

In connection with the woolen business I have visited every possible market that exists for woolen goods in the entire world. There is not a branch of the business, from wool growing to the marketing of the finished product, that I have

not studied at first hand. When in Europe, before establishing our plant in Passaic, I made a special study of the export business. For our European concern I visited all the markets of the world where there was any possibility of selling woolen goods and succeeded in opening new outlets wherever it was possible to do so. I not only had direct letters of introduction from the German Foreign Office to German diplomatic officials all over the world, but I also had letters from the Krupps in Essen to the representatives of their vast organization in all parts of the world, which enabled me to obtain direct and reliable knowledge of the real commercial and other conditions in the places visited, which would have been impossible for any one traveling without such most influential recommendations.

My experience proved that woolen goods are sold only to any extent in temperate climes and in countries where civilized garb is worn. No market for woolen goods for clothing can be found in tropical climes, where cotton and linen goods form the everyday wearing apparel; or in the far north, where furs are preferred. In countries like China and Japan tradition clings to other materials, such as silk or cotton, and as far as woolen goods are concerned, Japan is now fast equipping herself to supply at least her own requirements and those of her immediate neighbors. It is only a question of time before she will be a competitor in the markets of Europe and America for woolen goods, as she already is for many other staple articles of commerce. In South America the climate is against the development of a trade in woolen goods. My own European house had a branch in Buenos Ayres, but later on found it had to sell more cotton and linen goods than woolen goods on account of the climate. Australia has a small population, compared with its area, and being an English colony prefers for the most part English goods. In Egypt there was but a small demand for woolen goods.

As a proof of my experience I may state that I was appointed by the German Government to serve as an expert for the wool manufacturing industry on the German Tariff Commission which framed the last German tariff.

From my experience I therefore know to a nicety the ability of the woolen manufacturer to compete in foreign markets. I also know what rates are necessary to enable the American manufacturer to hold his own against European competition and what the chances are of American woolen manufacturers entering the open markets of the world. The theory of the development of foreign commerce is very fine, but it has its limitations. It must not be applied to industries which are not susceptible of development in that direction. The possibilities of exporting woolen goods are very limited. The only export market for American woolen goods worth cultivating would be in Europe, where the industry is very much older and more developed than in the United States, and with the mills of which American mills cannot even compete at home under free-trade conditions.

When the tariff question first came up, I had the pleasure of having Mr. Redfield at our mill, and went over all the different points with him. He is, however, so enamored of his efficiency theories and so thoroughly convinced that what is true of the industry with which he has had experience can be applied to all, including wool manufacturing, and he is so infatuated with the policy of building up our export trade at the cost of everything else, that it is impossible to argue the question with him. When he was at our mill in the early summer of 1911 he paid me the most flattering compliments regarding our plants, equipment and organization, and also regarding my handling of the labor question. Later, in Congress, he reversed himself and made severe criticisms of my handling of the labor question in his speech delivered August 1 and published in the Congressional Record, page 3576. I felt compelled to reply to his statements, and my reply was also published in the Record of August 19. Mr. Redfield sent me a very courteous answer to my letter, saying that when he found time he would make a statement regarding it. So far, however, he has not reverted to the subject. As in the case of our industry, so in all his speeches and writings — witness his recent outbreak regarding the cotton manufacturers — Mr. Redfield shows an inexcusable bumpiousness in delivering

himself *ex cathedra* on subjects about which he is most superficially informed. It is most unfortunate that the ideas of a man like Mr. Redfield, who is manifestly carried away by his enthusiasm along certain lines, should be given serious weight in the framing of the tariff policy of a country like the United States.

After this general word as to my personal experience in wool manufacturing and export trade, as well as in tariff making, I would pass to a consideration of the bill now before Congress. The rates proposed for the wool schedule by the Ways and Means Committee are as follows:

Raw wool, etc.	Free
Yarn	20%
Dress goods, cloth, etc.	35%

The question of a duty on wool is a matter which Congress must decide for itself, in full realization of its responsibility to the wool growing industry.

In the recommendation of a flat rate on partly and wholly manufactured woollen products, a fundamental mistake has been made. This flat rate is wrong from every point of view. It is wrong because of the greater cost of manufacture of fine fabrics, fully explained in my brief to the Ways and Means Committee. It is wrong from a fiscal point of view, because it needlessly sacrifices revenue. Fine goods have been imported annually with a foreign value of about \$10,000,000, or \$20,000,000 domestic value, at a duty averaging 100 per cent. To reduce that duty to 35 per cent is absurd and reckless, sacrificing \$7,000,000 revenue. To say that the reduction of duty will increase importations sufficiently to bring in greater revenue than at present is farcical, for importations of these fine goods would have to be increased threefold to bring in as much revenue as at present and any one with the least knowledge of trade conditions knows that there is not enough demand for fine goods to call for such an increase of importations. All that a flat rate of 35 per cent can do is to displace to a considerable extent the finer American woollen products and at the same time cause great loss of revenue to the Government.

With regard to fine goods not a single argument can be applied of all those which have been brought forward by the advocates of extreme tariff revision. The reduction of the duty on fine goods to the extent proposed will not make clothing cheaper for the masses, for the masses do not wear clothing made from such fabrics. It will not improve the quality of the American product. It will not bring any more revenue, but rather less, to the Government. One thing it will do, and that is to increase foreign importations, correspondingly curtailing the production of American fine goods and giving a severe setback to an industry which in late years has made marvelous progress in the United States — and all this in direct violation of the party pledges not to injure any legitimate American industry. The proposal of a rate of 35 per cent on fine goods shows, on the part of those who are responsible for the adoption of such a ridiculous rate, an absolute ignorance of the whole subject at issue or a fatuous recklessness betokening inability to deal with such important questions and unfitness for the responsible positions into which they have been thrust by the accident of political fortune.

On January 27 I went to Washington to attend the wool hearings, as did many other manufacturers, and submitted a brief specially relating to the manufacture of fine woollen and worsted products. The Ways and Means Committee, in the explanation which accompanies its proposed tariff bill, has laid great stress on the policy of differentiating between luxuries and necessities — which was one of the main points of my argument. While the Committee, however, has endorsed all I said in my brief about the propriety of the higher taxation of luxuries and has followed this policy with reference to many schedules, it has absolutely ignored it in the woollen schedule and has stultified itself by deliberately and wilfully avoiding the logic of its own conclusions, which would have led it to retain a higher duty upon the finer wool manufactures. In this the Committee has ignored even Democratic precedent, for the Wilson bill of 1894 provided two rates — for yarns above and below 40 cents per pound and

for fabrics above and below 50 cents per pound. The Committee has classified silk goods as a luxury and has placed a high duty upon them; but hard-twisted worsted yarns, which are used only for the very finest goods and especially by the silk industry, and are also purely luxuries, the Committee has placed under a flat rate of 20 per cent, which applies to all yarns. What is the reason of all this? It can only indicate an unwarranted and vindictive antipathy to the woolen and worsted industry, unworthy of the representatives of a great party or of legislators called upon to legislate for the country as a whole, irrespective of their own preferences or animosities. If the industry has made mistakes in the past, the industry of the present should not suffer for it. The criticisms and invective that have been hurled against the industry of late are absolutely out of place, as has been demonstrated to the satisfaction of any fair-minded man. If in the past the criticism was made that information was withheld from Congress, it must now be admitted that the Committee had the benefit of the most correct and reliable information from a number of recognized experts.

Resuming my analysis of the present bill, I would point out that in the case of cutlery, for instance, the Committee has retained a distinction between cheaper and finer goods, with a higher duty on the latter.

In the case of gloves, the Committee has retained an elaborate classification, according to material, finish, length and lining, allowing higher rates on those articles which represent greater cost, so as to compensate the American manufacturer.

Again, while the finest woolen products are all thrown into one mass with the cheapest shoddy products, and are called "necessities," automobiles have the benefit of the designation of luxuries, and the present 45 per cent duty is retained on finished automobiles and automobile bodies. In the fiscal year ending June 30, 1912, the United States *exported* automobiles to the value of \$21,500,000 and *imported* in the same period \$2,000,000 worth, foreign value, or about \$3,000,000 duty paid value. The total value of domestic production of automobiles and automobile bodies, according to the census

of 1909, was about \$240,000,000. The imports therefore constituted only 1.2 per cent of the value of the domestic product, and even allowing for duplications in the figures given for the latter, did not amount to 2 per cent. And yet tariff reformers howled when the imports of woolen manufactures only equalled 5 per cent of domestic production, although the *imports of fine woolen goods* have averaged in the past years over 30 per cent of their domestic production. On the latter the Committee has seen fit to reduce the duty by two-thirds, notwithstanding they are every bit as much luxuries as automobiles and even more so and brought in under the old tariff of about 100 per cent an average revenue of \$10,000,000. As a matter of fact fine woolen products are more uniformly a luxury than automobiles. Fine woolen products only enter into the apparel of well-to-do men and women, who pay high prices for their attire, and the extra price of the cloth plays little or no part in the final cost of the suit, dress, overcoat, wrap, etc. On the other hand, many automobiles — for doctors and other men who have to travel around much in the course of their business — trucks for business houses, etc., are not luxuries, but necessities. We have no grudge against the automobile business, and should like to see it prosper. But we want to know why, while such noble utterances are being poured forth at Washington against special interests, one interest is being favored to the exclusion of others.

Section IV, paragraph S, of the new tariff bill, provides :

That the President shall cause to be ascertained each year, the amount of imports and exports of the articles enumerated in the various paragraphs in section one of this Act and cause an estimate to be made of the amount of the domestic production and consumption of said articles, and where it is ascertained that the imports under any paragraph amount to less than 5 per centum of the domestic consumption of the articles enumerated *he shall advise Congress as to the facts and his conclusions by special message.*

As the imports of automobiles now amount, under the present duty of 45 per cent (which it is not proposed to

change) to not over 2 per cent of domestic production (according to the latest census) it seems to be up to the President to send in a special message on the subject right away.

Cotton thread, cotton yarn, etc., are classified as follows :

Nos. 1- 9 inclusive	5 $\frac{9}{10}$ %
10-19 "	7 $\frac{1}{2}$ $\frac{9}{10}$ %
20-39 "	10 $\frac{9}{10}$ %
40-49 "	15 $\frac{9}{10}$ %
50-59 "	17 $\frac{1}{2}$ $\frac{9}{10}$ %
60-99 "	20 $\frac{9}{10}$ %
100 and over	25 $\frac{9}{10}$ %

Cotton cloths are classified according to the yarn they contain and an extra duty of 2 $\frac{1}{2}$ per cent is levied on the cloth over and above the duty on the respective count of yarn contained therein. A distinction is also made between cloths which are not bleached, dyed, colored, stained, painted, printed or mercerized, and those which are, the latter being subject to an extra duty of 2 $\frac{1}{2}$ per cent.

Single yarns made of jute, not finer than 5 lea, pay only 15 per cent, while yarns finer than 5 lea pay 25 per cent.

Flax, hemp or ramie threads, twines, and cords made from yarn not finer than 5 lea or number pay 25 per cent; and if made from yarn finer than 5 lea or number, 30 per cent. Single yarns of the same material pay less.

When the Committee attacks the intricate and important item of straw hats and other manufactures of grass and straw, it shows itself imbued with the spirit of scientific tariff making, so that partly manufactured products, composed of these materials, if not bleached, dyed, colored or stained, take a rate of 15 per cent, and if bleached, dyed, colored or stained, a rate of 20 per cent; while hats, bonnets and hoods composed of these materials, if not blocked or trimmed, are taxed at 25 per cent, but if blocked or trimmed, at 40 per cent.

When the question of a sliding scale was broached by a wool manufacturer at the recent hearings, the answer was made by one of the Committee that such a sliding scale of ad valorem rates was unnecessary, as the European value

was also higher on the finer products, the result of more advanced processes, so that a flat rate would cover all requirements. It was pointed out that the cost of producing finer goods in the United States rises in more rapid progression with the value of the product than it does in Europe, and therefore a higher ad valorem rate was necessary on finer articles. As shown in the foregoing examples, the truth of this statement was recognized by the Committee with regard to certain schedules, but for some inscrutable reason the Committee refused to apply the same principle to the woolen schedule.

In spite of the evident keen appreciation of the elementary principles of tariff making shown in some schedules, when it came to the wool schedule the Committee was unable to see any reason for making any distinction in rates between the very cheapest fabrics and the very dearest, or to allow anything whatever for goods which have been subjected to various processes entailing much additional labor cost and machine cost. As a matter of fact the new wool schedule is the strongest possible testimonium paupertatis which the Committee could possibly have given to the country regarding its ability to construct a tariff.

As it is purposeless for any man to criticise without offering a substitute and as there seems to be little likelihood of my previous rates being accepted, I have again carefully considered the matter of rates and would suggest that in view of the rates proposed by the Committee, it might be better, as a matter of compromise, to simplify my proposed rates by rounding them off as shown in the following table. For the sake of comparison I give in parallel columns the rates of the new Underwood bill and those of the Wilson bill of 1894. I have based these rates on free wool because, as before stated, the question of the duty on wool (regarding which I have given my views at length in my brief to the Committee and elsewhere) is now in the hands of Congress. Should Congress finally decide to place a duty on wool, the rates on wool manufactures suggested below ought to be

correspondingly raised to compensate the manufacturer for the duty on the raw material :

	Proposed Rates.	New Underwood Bill.	Wilson Bill 1894.
Greasy wool, washed wool, scoured wool	Free	Free	Free
Noils, waste, *rags, shoddy	"	"	15%
Top waste, etc.....	"	"	15%
Tops.....	15%	15%	20%
Rovings.....	20%	15%	0%
Yarns, woolen, single or twist — gray, bleached or colored :		20%	30%, not over 40c per lb. 40%, over 40c per lb.
Not over 33 cut	20%		
Over 33 cut	25%		
Yarns, worsted, single or twist — gray, bleached or colored :		20%	30%, not over 40c per lb. 40%, over 40c per lb.
Not over 15s.....	25%		
15s to 30s	30%		
30s to 45s	35%		
45s to 60s	40%		
60s to 75s	45%		
Over 75s	50%		
Worsted yarns, hard twisted, same duty as above, according to number, plus extra duty of	10%	Same as other yarns	New industry used only in very fine goods and silk; not provided for in Wilson bill.
Worsted yarns, hard twisted and singed, same duty as above, according to number, plus extra duty of	20%		
Cloths and Dress Goods :		35%	40%, not over 50c per lb. 50%, over 50c per lb.
Foreign value not over 50c per lb.	45%		
" " 50c to 70c " "	50%		
" " 70c to 90c " "	55%		
" " over 90c " "	60%		

* Rags free under Wilson bill.

These rates are certainly the lowest under which the industry as a whole can hope to have any chance of competing with European manufacturers.

Aside from the rates themselves, and an even more immediate and pressing question for decision is the time when the new tariff bill shall take effect. This is of special importance

for the wool industry. Representatives of those districts which include woolen mills should insist that the new tariff legislation, whatever it may be, shall not take effect until all branches of the trade—from manufacturer to the retail merchant—have had time to readjust themselves to the new rates.

Manufacturers are now making goods for Fall delivery—from August to October and November. The raw material for all these goods has been bought at present prices, based on present duties. If any tariff change takes place before delivery of these goods, values will be radically upset. The trade as a whole cannot stand such sudden, wholesale cuts in values, and the result cannot fail to mean embarrassment for many firms; and once such conditions arise, no one can foresee how far they will go.

The wool industry would suffer most by “snap” legislation. It is an industry in which the raw material duty will be cut the most, and also one in which provision must be made a much longer time ahead for the purchase of material, owing to the distance of the wool markets from the manufacturing centers and owing to the numerous and lengthy processes of manufacture. If imports at lower rates are made possible before the close of the Fall season, there is no way by which a heavy loss can be avoided on goods now being manufactured on the basis of the present rates on raw material, and this loss will affect the whole trade—manufacturers of cloth, jobbers, manufacturing clothiers and retail merchants of cloth and clothing, with the thousands of employees dependent upon the various branches of the trade for their living. Whatever duties are adopted on manufactures of wool, they should not go into effect until at least six months after the President has affixed his signature to the bill. Even now customers, who have so far relied on the assurances given by Democratic leaders, are taking alarm at the radical legislation which has been proposed by the Committee and are demanding to know whether the mills will guarantee the maintenance of prices now being quoted for Fall. Regarding raw wool, at least three months should

elapse between the final enactment of the bill and the operation of the new rate. Merchants and manufacturers cannot cover their requirements overnight, and must, in order to make their purchases soundly and properly, have some advance notice of what they have to expect in the way of duty and an opportunity to gauge the effect of any change of duty on market prices.

This demand is simple and absolutely just. It has nothing to do with politics or party policy. It is simply a commercial necessity, the justice of which must be recognized by anybody with the faintest idea of practical business. The provision in question was embodied both times in the former Underwood bills. If this absolutely justified demand is granted, it would mean that manufacturers and their customers can go sanely ahead with their business without having to look in the paper each morning to see what new nonsensical rumor has emanated from Washington regarding tariff legislation. They will know that at least some time will be given them after the matter is finally settled to adjust their business to the changed conditions, which in themselves will be bad enough to bear. To ignore or deny this demand would be a direct violation of the promises made time and time again during the recent campaign by all Democratic leaders, from the President down, that they would not injure any legitimate American business.

The last German and the last French tariff both provided that about one year should elapse between the enactment of the tariff law and its going into operation. This shows that the governments and legislative bodies of these countries recognized the significance of the sudden operation of tariff laws with the consequent far-reaching disturbance of business conditions. The proposal of a period of six months between the enactment of the law and its operation in the United States is already a great departure from European conservative methods. To adopt a still shorter period would be impossible without causing severe injury to the industry.

It has been stated that the industry, after all the tariff agitation which has taken place, is prepared for any changes. This is nonsense. Manufacturers could not prepare for such

tariff changes without using up all the material on hand and buying no more, and gradually shutting down their plants. The nature of their business compels them to continue manufacturing on the old basis until a change is definitely made. Manufacturers could only "prepare" for tariff changes by curtailing or wholly ceasing production, at loss to themselves and their work-people and with great harm to their organization.

Mr. Underwood is reported to have said that the immediate operation of the new tariff would be of benefit to the industry, as European mills are so busy that they cannot at present enter the American market. If Mr. Underwood really made this statement, it could only have been based upon information given to him by interested parties who have their own ends to serve. Anyhow it is not true. America offering the best market, European manufacturers would surely neglect some of their other markets. And if European manufacturers are really at present too busy to enter the American market and disturb American manufacturers, then what is the purpose of the feverish haste shown to make the new law immediately operative? Only importers and foreign manufacturers could benefit by the immediate operation of the law, and it is inconceivable that any American Congress should deliberately choose to favor foreign interests in preference to American.

Full and ample time should be allowed for the proper consideration of the new bill by the entire Congress, and a "snap" bill should not be foisted upon Congress by a handful of men who have either no practical knowledge of business conditions or by training and interests are impelled to look only at one side of this question and fancy they can increase American exports at the expense of certain of our present industries. Many of the members of the new Congress sit there for the first time, elected to represent constituencies vitally affected by the new tariff. It would be unjust to attempt to crowd through legislation framed in advance in secret sessions of the various branches of the legislative body, without giving *all the representatives of all the people* an opportunity to carefully

examine the new bills and judge of their effect upon their constituents.

The Committee says that the future growth of our great industries lies beyond the seas. A most poetic thought! But what about the present? Or maybe it is a Delphic utterance, which, like those of old, can be construed to fit the subsequent event. In so far the Committee is right: if the bill is adopted, much of our industry will be transferred beyond the seas, but it will be foreign industries that grow and not our own.

The history of American tariff legislation has been a continual swing of the pendulum, from one extreme to the other. No party has had the foresight or the courage to call a halt and adopt a middle way. The Democratic party now has the chance of a generation to adopt such a conservative middle way and, while assuring to the country a continuance of prosperity, may also secure for itself a long lease of power.

If this statement is strong, the provocation is great. It is small satisfaction to our industry to know that the popular verdict less than two years from now will set the seal of its disapproval upon a measure so wantonly destructive as the one proposed. The thing of importance for us now is to try, if maybe, to mitigate the severity of this doctrinaire legislation and to temper if possible the harm which such a measure will inevitably bring to American industry and American workers.

No doubt the Committee has done its best considering its training and considering the fact that none of the Committee are experienced manufacturers or business men. When the need was emphasized of a thorough investigation of this subject, President Wilson is reported to have said that we have been investigating all our lives and it is useless to investigate any more. Following the methods which have hitherto been employed, we can investigate another 100 years and be no nearer the truth. But why not profit by the examples of Germany and France and by the appointment of a non-partisan tariff commission, representing all the country's interests — agricultural, industrial and commercial — arrive at a business-like tariff bill for the final consideration of Congress?

Although born abroad, I think I am as good an American as the next man; but I cannot help expressing it as my conviction that in this respect foreign methods are far to be preferred to our own.

To President Wilson's message, I am sure, no American citizen can take exception, and I for one heartily subscribe to the sentiments expressed in it. But the contents of the message are not translated into concrete terms in the tariff bill. The bill and the message are as far apart as the two poles. The President's suggestion that we should not proceed headlong in this matter is excellent, but the danger of headlong procedure by the present method is very great. The President's ideals, which after all are the ideals of all of us, would have far more chance of being fittingly realized under a Commission such as I have indicated, than in the present hodge-podge bill, each schedule of which betrays a different principle of tariff making.

As there is no possibility of the appointment of a tariff commission to consider the present bill, it is all the more necessary that the most serious consideration be given to it prior to its enactment. It is not a joint responsibility of all legislators, but an individual responsibility, resting equally upon each Congressman, each Senator and upon the President himself. All were unanimous in their assurances before and after election that all legitimate business would be safe in their hands. None I am sure desires to appear before the American people in the light of one of those

That palter with us in a double sense;
That keep the word of promise to our ear,
And break it to our hope.

THE SENATE WOOLEN SCHEDULE.

Senate Finance Committee Text of the New Tariff Bill, Reported by the Committee to the Democratic Senatorial Caucus.

THE following is the text of the wool and woolen provisions of the new Democratic tariff bill, as revised by the Senate Committee on Finance and submitted for approval to the Democratic Senatorial caucus June 20, 1913.

All words stricken out of the House bill are enclosed in parentheses, and the new Senate provisions are printed in capitals.

SCHEDULE K—WOOL AND MANUFACTURES OF.

295. Combed wool or tops and roving or roping made wholly or in part of wool or camel's hair, and on other wool and hair which have been advanced in any manner or by any process of manufacture beyond the washed or scoured condition, not specially provided for in this section, 15 per centum ad valorem.

296. Yarns made wholly or in chief value of wool, 20 per centum ad valorem.

297. Cloths, knit fabrics, felts not woven, and all manufactures of every description made, by any process, wholly or in chief value of wool, not specially provided for in this section, 35 per centum ad valorem; CLOTHS IF MADE IN CHIEF VALUE OF CATTLE HAIR OR HORSE HAIR, NOT SPECIALLY PROVIDED FOR IN THIS SECTION, 25 PER CENTUM AD VALOREM; PLUSHES, VELVETS, AND ALL OTHER PILE FABRICS, CUT OR UNCUT, WOVEN OR KNIT, WHETHER OR NOT THE PILE COVERS THE ENTIRE SURFACE, MADE WHOLLY OR IN CHIEF VALUE OF WOOL, AND ARTICLES MADE WHOLLY OR IN CHIEF VALUE OF SUCH PLUSHES, VELVETS, AND OTHER PILE FABRICS, 40 PER CENTUM AD VALOREM; STOCKINGS, HOSE AND HALF HOSE, MADE ON KNITTING MACHINES OR FRAMES, COMPOSED WHOLLY OR IN CHIEF VALUE OF WOOL, NOT SPECIALLY PROVIDED FOR IN THIS SECTION, 20 PER CENTUM AD VALOREM; STOCKINGS, HOSE AND HALF HOSE, SELVEDGED, FASHIONED, NARROWED, OR SHAPED

WHOLLY OR IN PART BY KNITTING MACHINES OR FRAMES, OR KNIT BY HAND, INCLUDING SUCH AS ARE COMMERCIALY KNOWN AS SEAMLESS STOCKINGS, HOSE AND HALF HOSE, AND CLOCKED STOCKINGS, HOSE AND HALF HOSE, ALL OF THE ABOVE, COMPOSED WHOLLY OR IN CHIEF VALUE OF WOOL, IF VALUED AT NOT MORE THAN 70 CENTS PER DOZEN PAIRS, 30 PER CENTUM AD VALOREM; IF VALUED AT MORE THAN 70 CENTS PER DOZEN PAIRS, 50 PER CENTUM AD VALOREM; PRESS CLOTH COMPOSED OF CAMEL'S HAIR, 15 PER CENTUM AD VALOREM.

298. Blankets and flannels, composed wholly or in chief value of wool, 25 per centum ad valorem (; flannels composed wholly or in chief value of wool, valued at above 50 cents per pound, 35 per centum ad valorem).

299. Women's and children's dress goods, coat linings, Italian cloths, bunting, and goods of similar description and character, composed wholly or in chief value of wool, and not specially provided for in this section, 35 per centum ad valorem.

300. Clothing, ready made, and articles of wearing apparel of every description, including shawls whether knitted or woven, and knitted articles of every description made up or manufactured wholly or in part, and not specially provided for in this section, composed wholly or in chief value of wool, OR OF WOOL AND INDIA RUBBER, 35 per centum ad valorem.

301. Webbing, suspenders, braces, bandings, beltings, bindings, cords, cords and tassels, and ribbons; any of the foregoing made of wool or of which wool or wool and india rubber are the component materials of chief value, 35 per centum ad valorem.

302. Aubusson, Axminster, moquette, and chenille carpets, figured or plain, and all carpets or carpeting of like character or description, NOT SPECIALLY PROVIDED FOR IN THIS SECTION, 35 per centum ad valorem.

303. Saxony, Wilton, and Tournay velvet carpets, figured or plain, and all carpets or carpeting of like character or description, 30 per centum ad valorem.

304. Brussels carpets, figured or plain, and all carpets or carpeting of like character or description, 25 per centum ad valorem.

305. Velvet and tapestry velvet carpets, figured or plain,

printed on the warp or otherwise, and all carpets or carpeting of like character or description, 30 per centum ad valorem.

306. Tapestry Brussels carpets, figured or plain, and all carpets or carpeting of like character or description, printed on the warp or otherwise, 20 per centum ad valorem.

307. Treble ingrain, three-ply, and all-chain Venetian carpets, 20 per centum ad valorem.

308. Wool Dutch and two-ply ingrain carpets, 20 per centum ad valorem.

309. Carpets of every description, woven whole for rooms, and Oriental, Berlin, Aubusson, Axminster, and similar rugs, 50 per centum ad valorem.

310. Druggets and bookings, printed, colored, or otherwise, 20 per centum ad valorem.

311. Carpets and carpeting of wool (, flax,) or cotton, or composed in part of (any) EITHER of them, not specially provided for in this section, and on mats, matting, and rugs of cotton, 20 per centum ad valorem.

312. Mats, rugs for floors, screens, covers, hassocks, bed-sides, art squares, and other portions of carpets or carpeting, (made) COMPOSED wholly or in (part) CHIEF VALUE of wool, and not specially provided for in this section, shall be subjected to the rate of duty herein imposed on carpets or carpeting of like character or description.

313. Whenever in this section the word "wool" is used in connection with a manufactured article of which it is a component material, it shall be held to include wool or hair of the sheep, camel, or other like animals, whether manufactured by the woollen, worsted, felt, or any other process.

(314. Hair of the Angora goat, alpaca, and other like animals, and all hair on the skin of such animals, 20 per centum ad valorem.)

315. Tops made from the hair of the Angora goat, alpaca, and other like animals, (25) 15 per centum ad valorem.

316. Yarns made of the hair of the Angora goat, alpaca, and other like animals, (30) 20 per centum ad valorem.

317. Cloth and all manufactures of every description made of the hair of the Angora goat, alpaca, and other like animals, not specially provided for in this section, (40) 35 per centum ad valorem.

318. Plushes, velvets, and all other pile fabrics, cut or uncut, woven or knit, whether or not the pile covers the entire surface, made wholly or partly OF WOOL OR of the hair of the Angora goat, alpaca, and other like animals, and articles made wholly or in chief value of such plushes or velvets, (50) 40 per centum ad valorem.

Paragraph 396 provides that where two or more rates of duty may be applicable, the highest rate shall be levied, and also explains the meaning of the words "component material of chief value." The paragraph follows:

396. That each and every imported article, not enumerated in this section, which is similar, either in material, quality, texture, or the use to which it may be applied, to any article enumerated in this section as chargeable with duty, shall pay the same rate of duty which is levied on the enumerated article which it most resembles in any of the particulars before mentioned; and if any nonenumerated article equally resembles two or more enumerated articles on which different rates of duty are chargeable, there shall be levied on such nonenumerated article the same rate of duty as is chargeable on the article which it resembles paying the highest rate of duty; and on articles not enumerated, manufactured of two or more materials, the duty shall be assessed at the highest rate at which the same would be chargeable if composed wholly of the component material thereof of chief value; and the words "component material of chief value," wherever used in this section, shall be held to mean that component material which shall exceed in value any other single component material of the article; and the value of each component material shall be determined by the ascertained value of such material in its condition as found in the article. If two or more rates of duty shall be applicable to any imported article, it shall pay duty at the highest of such rates.

FREE LIST.

652. Wool of the sheep, hair of the camel, ANGORA GOAT, ALPACA, and other like animals, NOT SPECIALLY PROVIDED FOR IN THIS SECTION, and all wools and hair on the skin of such animals, AND PAPER TWINE FOR BINDING ANY OF THE FOREGOING.

653. Wool wastes: All noils, top waste, card waste, slubbing waste, roving waste, ring waste, yarn waste, bur waste, thread waste, garnetted waste, shoddies, mungo, flocks, wool extract, carbonized wool, carbonized noils, and all other wastes not specially provided for in this section.

WINTHROP L. MARVIN,

Secretary National Association of Wool Manufacturers.

Editorial and Industrial Miscellany.

HOSTILE TO BUSINESS MEN.

A MOST UNFORTUNATE ATTITUDE OF THE NEW NATIONAL ADMINISTRATION.

PRESIDENT WILSON, even before his accession to his present office, had made an unfortunate impression on the country by

The phraseology of the tariff law as applied to fabrics made of mixed materials has been changed so that it now reads "made wholly or in chief value of wool," whereas heretofore the wording has been "made wholly or in part of wool." This change has been looked upon with a good deal of anxiety by wool manufacturers. It appears, however, that in the cotton schedule, Paragraph 271, such goods if composed in chief value of cotton will be dutiable at 30 per cent, or 5 per cent less than if made "wholly or in chief value of wool." The paragraph is as follows :

271. All articles made from cotton cloth, whether finished or unfinished, and all manufactures of cotton or of which cotton is the component material of chief value, not specially provided for in this section, 30 per centum ad valorem.

envied in American manufacturers and merchants the very qualities which the Democratic Presidential candidate had declared that they did not possess — the qualities of initiative, courage, aggressiveness verging often upon recklessness — qualities which without any such elaborate assistance as was given to their foreign competitors by their governments had enabled these American men of business to work out an unexampled development of their own country and at the same time to increase their export com-

merce as a whole more rapidly and largely than any other nation in the world.

Foreign governments and foreign peoples knew all this, though the gentleman soon to be President-elect and then President apparently did not. American business men wondered at and resented Mr. Wilson's unjust attack upon them, and looked forward with graver concern to the opening of his Administration than to the inauguration of any other President of our time. This deep distrust of the new Executive by the business leaders of the country was quickly and completely justified.

One of the members of the new Wilson Cabinet, Mr. Redfield, who represented perhaps more closely than any other member the views and prejudices of his President, proclaimed soon after the new tariff for revenue only measure was introduced that any manufacturer who reduced the wages of his employees or the amount of his active machinery after this bill had passed would have agents of the Department of Commerce let loose upon him to examine his books and investigate his business, and, if possible, convict him of incompetence. That was a threat that better suited Russia or medieval Spain than twentieth century America. It was such an astounding pronouncement that at first American business men could not believe that it could have been uttered by any responsible member of a National Administration. It was in effect a mandate to the great industries of this country that they must run if need be at a loss, whether they could sell their goods or not, on penalty of a Federal inquisition. There is no record of such a ukase in our time by any government calling itself civilized and Christian. If the practical results of the new tariff for revenue only are even approximately those of the Gorman-Wilson law, it will require a host of inquisitors as large as the combined army and navy of the United States to attend to the cases of those employers of labor who have the temerity to reduce their wages or curtail their working force.

While indignation was still hot against this threat of Secretary Redfield, President Wilson himself issued another pronouncement that an "insidious" and "dangerous" "lobby" was at work in Washington and elsewhere seeking to defeat the Administration tariff for revenue only. Included in this accusation, which soon took the form of a definite list of names, were some eminent business men, students of economics, conspicuous for intelligent interest in public affairs. They were all classed alike

as "lobbyists" in the violent attack of the President and his followers, and an investigation was ordered by the Senate.

First President Wilson has astonished and pained the country by a most unjust characterization of American business men in general. Then through one of his chief lieutenants he threatens business men with extreme displeasure and a Federal inquisition if they dare to reduce wages or shut down any of their machinery in the ruthless competition, under Mr. Wilson's proposed tariff for revenue only, with foreign manufacturers, who pay one-half or one-third or one-fourth of the American wage rate. Finally he assails as "lobbyists" American manufacturers and merchants and their spokesmen at Washington. President Wilson apparently assumes that opposition to a tariff for revenue only, which gravely threatens all the great productive industries of the United States, and advocacy of a tariff for revenue and protection, constitute a high crime and misdemeanor, for which a dungeon or exile would be scarce too great a punishment.

This intolerant, vindictive spirit is absolutely certain to arouse an ever-deepening resentment among American men of business. They sought no quarrel with President Wilson. They have kept well within their rights as free men and American citizens. These rights include free speech, a free press, and the right of petition. This rough denial of fair play to the men who represent the great national industries in united remonstrance against Mr. Wilson's tariff for revenue only idea marks a most inauspicious beginning of the new Administration.

IRELAND AND HER TEXTILES.

FAMOUS WOOLENS, LINENS AND CARPETS, AS MADE IN THE EMERALD ISLE.

AN interesting story on the Irish textile industry by a writer, "J.R.B.," who apparently knows his theme and loves it, is contributed to the "Canadian Textile Journal":

The woolen trade in Ireland has passed through many vicissitudes—indeed the same may be said of most of the Irish industries. About 1689 English woolen manufacturers became alarmed at the growing competition from Irish sources and without delay a bill was introduced by Parliament which imposed duties on all exports of draperies fixed at from 10 per cent to 25 per cent ad valorem. The Irish exports consequently became

less and less, and then subsequent legislation prohibited the export of Irish woollens altogether. The weavers then emigrated to France, Holland, Spain, and Portugal, so that 90 years afterwards when there was a revival skilled workers could not be found. Between 1782-1800 there was a great awakening and the woollen trade became prominent, but faded away again until 1860. Prior to 1860 the wool was used for rough cloths, friezes, etc., flannels and blankets. Of course the wool was all native — bred and shorn on the sheep ranches and cleaned locally. After 1860 merino wool was imported into the island from Australian sources and the results were remarkable. The trade in woollens expanded, mills were established and the high-class reputation of the goods at once branded them as the best to be obtained in any market. Curiously enough there is no such thing as a woollen manufacturing town in Ireland. The factories are spread all over the island in scattered districts, and in remote places, and each mill has to train its own hands owing to the scarcity of skilled labor. Of late years the export trade has been considerably enlarged.

IRISH WOOLENS AND LINENS.

As an instance of how the cloth produced from Donegal wool wears I give my own experience. I happened to be on a journalistic visit in the northwest and was introduced to a gentleman in the woollen trade. He surprised me with the prices that were charged for homespun cloth. First he showed me the raw wool dirty from the sheep's back and two months afterwards it was converted into such a magnificent suit of clothes that I actually wore them as summer dress at a committee of inquiry sitting in the British House of Commons where a man is expected to be "A1" in general appearance. Now the cloth after being spun from the wool only cost me \$3.50, and I paid \$6 to the tailor for shaping it into a suit. I had the suit three years, during which period it appeared little the worse of wear. Homespuns can be bought at the same price to-day, but the secret of success lies in the treatment of the wool and the spinning.

Ireland has also a great reputation for its linen manufacture, which is carried on very extensively in Ulster. Irish linen has a great demand and though the most modern devices are to be seen in use, there are still hand looms used in places like Lurgan and Ballymena. But flax spinning by machinery advanced by much greater strides down to 1828 in England and in Scotland than it did in Ireland, but Ireland quickly made up its leeway, and once attaining supremacy she has retained it against all competition.

IRISH CARPET INDUSTRY.

While the linen industry of Ulster is a great and national asset, a passing reference should also be made to Irish carpet making — one of the most striking things in the country's revival.

Indeed it is a fact that one small company with a capital of \$24,000, whose headquarters are at Naas, makes the sumptuous rugs — the orders being secured in competition with the world — for such large hotels in London as the Carlton and Ritz and numerous palatial residences, steamships, etc. These rugs are Irish designed, Irish dyed, Irish made and Irish finished, and they challenge the world. According to the statistics of the Irish Department of Technical Instruction, the exports of manufactured goods have increased from £20,782,673 to £26,931,094 between the years 1907 and 1911. Some of the figures are as follows:

	1907.	1911.
Textiles : Yarns, thread, rope, cordage, etc. . .	£2,656,906	£2,735,387
Piece goods, apparel, and drapery, etc.	13,124,093	17,021,565
Leather goods : Leather	67,897	64,643
Boots, shoes, saddlery, India rubber goods..	119,660	217,204

The world is perhaps so little accustomed to think of Ireland as a manufacturing country (as indeed it is essentially an agricultural one), that few people probably have ever considered the peculiarly high reputation which Irish-made goods have won for themselves in a variety of lines. Yet the facts remain and in textiles she is taking a lead.

MADE IN IRELAND.

Before passing from Ireland there is one thing that should not escape the attention of manufacturers, and that is the famous Irish trade-mark. It arose in this way. Manufacturers met and passed the following resolution: "That it is expedient that a registered trade-mark should be obtained for the use of members of industrial development associations and that a committee be appointed with power to carry out this matter, the expenses to be defrayed by pro rata contributions from the different associations now in existence." In this simple and mild way there came into existence a national trade-mark. It is now vested in the Irish Development Industrial Association who grant the use of it for a small fee. All Irish goods — that is, recognized Irish goods — are stamped with it. On the mark appears the words "made in Ireland" in signs of national character, and by this means foreign made goods cannot be put on a merchant for the Irish made article. Another very good system the Irish have and that is the giving up of a week to the selling of products of Irish industries. It is known as "Irish week." It is a movement that is giving satisfactory results and encouragement to manufacturers.

AMERICAN AND ENGLISH WOOL TERMS.

AMERICAN and English wool terms are not the same, and an effort to distinguish and assimilate them is made in a recent issue (May 22) of the "Wool Record," of Bradford, England, as follows:

It is quite true that many things connected with the commercial life of the United States differ from those of Great Britain, and in one important essential there is a difference in the method of dealing with wool. Everybody on this side of the Atlantic knows that merinos and crossbreds are spoken of as being of certain qualities, say, for instance, 32's, 40's, 50's, 60's, 70's, etc., these figures denoting their spinning count. In the United States such terms are not as it were "current coin" among buyers and users, their denominations being known as 1/2 blood, 3/8 blood, 1/4 blood, etc., terms which may sound strange to many of our readers. Seeing that there is a prospect of increased business being done with the United States, we think it wise to give readers a list of the denominations which are applied to wool across the Atlantic, and their corresponding quality here in England. The list, which is well worth preserving for future reference, is as follows:

American terms.				Quality.
Fine	corresponding to a Bradford			64's-66's
1/2-blood.....	"	"	"	60's
3/8-blood.....	"	"	"	56's
1/4-blood.....	"	"	"	50's
Low 1/4-blood.....	"	"	"	44's-46's
Common.....	"	"	"	40's
Braid.....	"	"	"	36's

How the above American denominations are arrived at is not exactly known, but we surmise that they are reached by crossing the merino with the pure mutton sire. It is well known that the merino has from the beginning been the principal animal kept by United States sheep men, and it is only of recent years that an attempt has been made to place the sheep and wool industry on a broader foundation like it is here in England by specializing in both mutton and wool. There is a great deal to do across the Atlantic among domestic sheep men, and all are anticipating that "free wool" will spell ruin to their flocks. We expect no such disaster, and if American sheep men will only look at things in a common sense way and adopt English methods of sheep farming, we are satisfied that they will be able to make their industry pay. We submit that if the farmers of Great Britain can successfully breed and keep twenty-eight million of sheep, United States sheep men can double their flocks, and yet there will not be any-

thing like the same number of sheep per acre as there are in the British Isles to-day. We have lately had the privilege of inspecting several American fleeces, and it appears to us that while some were good, there is considerable room for improvement before they equal in style, character, and condition the wools which are being grown in Great Britain at the present time. One of the principal reasons why English wools appeal to American users is the splendid condition and the sound manufacturing characteristics which they possess, and we believe that if United States sheep men will work on similar lines, they will be able to raise sheep successfully, as land is so much cheaper across the Atlantic than here in England.

Below we give the lengths or counts of yarn which American wools are often spun to, these particulars having been supplied us by a leading Boston wool house :

Quality.	Spun count.
66's-64's top from domestic wool is spun to	2-50's
60's " " " " " "	2-40's
56's " " " " " "	2-36's
50's " " " " " "	2-32's
44's-46's " " " " " "	2-28's
40's " " " " " "	2-20's
36's " " " " " "	2-16's

NOTE: A combination of the two tables given in the article shows more readily the count to which the various grades of American wool are best adapted :

Name.	Count.
Fine.....	2-50's
$\frac{1}{2}$ blood.....	2-40's
$\frac{3}{8}$ blood.....	2-36's
$\frac{1}{4}$ blood.....	2-32's
Low $\frac{1}{4}$ blood.....	2-28's
Common.....	2-20's
Braid.....	2-16's

EDITOR OF THE BULLETIN.

AN ANCIENT DECEIT.

FALSE packing of wool is an expedient not unknown in America that has its parallel in other wool-growing countries of the world. Nor is this practice of modern origin, for it goes back centuries into English history and legislation. The "Wool Record" of Bradford, England, in a recent issue, says of it :

Many of our readers who are interested in English fleeces will no doubt be equally as desirous as the correspondent whose communication we publish below to see that those who buy that

class of wool have their interests protected in a reasonable way. We give below our client's remarks, and also the law upon the subject as it now stands: "As wool gets higher in price it becomes increasingly necessary that buyers should take every care in their purchasing. The English clip will soon be upon us, and we think you would be doing a service to buyers if you would remind them — or inform those who do not exactly know — of the protection which the law gives them against such things as the hiding of dirt lumps or locks in fleeces. In some parts of the country there is considerable difficulty with farmers, and even with auctioneers in these matters, and it is a help to know just how we stand."

CAUTION
TO GROWERS
AND
WINDERS OF WOOL.

Whereas, Manufacturers and Woolstaplers having, for some years past, more particularly of late, sustained considerable loss from deceitful winding of Wool, — that is, from the too general practice of inclosing in the Fleeces, Tag, Locks, Lamb's Wool, Unwashed Wool, Felt Wool, Tar, Stones, Clay, Dung, Straw, Grass, and also by the pulling of Cotted Fleeces, etc., deem it necessary to publish Extracts from the existing Statutes for the prevention and punishment of such practices. They also hereby inform such Growers and Winders of Wool as may hereafter be found in such practices, that they may expect the enforcement of the Legal Penalties for so doing.

Extract from the Statute 23 Henry VIII., c. 17.

"No Person shall wind, or cause to be wound, in any Fleece, any Wool not being sufficiently rivered or washed, nor wind, or cause to be wound, within any Fleece, Clay, Lead, Stones, Tails, deceitful Locks, Cots, Lamb's Wool, nor any other deceitful thing, whereby the Fleece may be more weighty, to the deceit and loss of the buyer."

Sixpence per Fleece only was the Penalty under the above Statute, but this was found an insufficient preventive, and therefore it was enacted by

28 Geo. III., cap. 38.

"That every Person offending as above, in lieu of every Sixpence, forfeit and pay Two Shillings for every Fleece, and the whole thereof to go to the finder or prover of the said-deceit, to be heard and determined by one or more Magistrates in a Summary way."

Fleeces also bound up with Cord, etc., or found wetted inside, are subject to the same penalty.

THE WOOLEN TRADE OF SCOTLAND.

A FAVORABLE account of the Scotch woolen manufacture is given by Consul Rufus Fleming in the "Daily Consular and Trade Reports" of May 14, 1913. Mr. Fleming says :

The cloth and hosiery mills in south Scotland were active in every department, the total value of products running up to \$20,000,000, according to the best authorities in the woolen trade. The only slackness was in the mills of two or three cloth firms that failed to adapt their styles to the prevailing taste of the markets; and even these firms in the latter part of the year obtained work from other manufacturers who were fortunate enough to have surplus orders. The pressure in spring and fall required all hosiery factories to run overtime and with night shifts. The introduction of a great variety of power frames and machines in the last few years has completely revolutionized this industry. Formerly hosiery manufacture was carried along on hand frames worked by men and boys, but now female labor predominates. Notwithstanding the fact that the efficiency of labor has been enhanced by machinery, and that labor cost has been somewhat reduced, both tweed and hosiery firms say that the large advances in the prices of wools and yarns and other manufacturing requisites narrowed their margin of profit last year, and will probably lead to a considerably higher scale of prices for goods this season.

As nearly all the yarns required for the south Scotland woolen industry are spun in the district, the spinners last year were compelled to run their machinery day and night to handle the orders placed.

The wool consumed by Scotch manufacturers comes largely from Australia, New Zealand, South Africa, and Argentina. The competition for this market last year was stronger than ever, as indicated by the action of the government of New South Wales in providing a comprehensive display of the wools of that State in Hawick, a woolen manufacturing center. The qualities generally ran from the coarse combing to the extra superfine merino, and every producing area of the State was represented by a variety, indicating the growth under the varied climatic conditions in the different districts.

WOOL MANUFACTURING IN PIEDMONT.

Wool manufacturing prospers in Italy. It received an impulse from the African war with Turkey. Labor cost, of course, is low. The principal wool manufacturing center in Italy is the

district of Piedmont, which has 90 mills with 5,500 looms. The "Daily Consular and Trade Reports" of May 17, 1913, say of the industry in Piedmont:

Spinners, taking advantage of the low price of tops in February, bought largely for the whole year, and favored by the gradual increase of the raw material began in August to obtain from weavers good prices for their yarns. The weavers on their part were favored with the same condition in negotiating with the wholesale dealers in cloth. Further, the demand for cloth from the war office was exceptionally heavy, and that from hosiers also unusually keen.

The prices of yarns per pound in February, 1912, and the corresponding figures for December, 1912, were as follows:

Yarns.	February.	December.
Type A No. 2/45	\$0.71	\$0.80
No. 2/52 .....	.73	.82
No. 1/22½ .....	.64	.73
No. 1/28 .....	.67	.74
Type AA No. A/60 .....	.79	.87
No. 1/30 .....	.68	.78

The better dividends paid during 1912 are a proof of the sound condition of the industry. The national exports of yarns and cloths in 1912 were greater than 1911, their value being \$2,549,689, as against \$2,990,650 in 1911.

All the mills were still running at the maximum capacity in February, 1913, but some uneasiness was felt, owing to the steadiness of prices of raw material.

The average monthly amount of wool conditioned in Biella, the most important Italian center of that industry, was as follows in 1911 and 1912:

Year.	Mohair Yarn.	Tops.	Scoured.	Noils.	Waste.	Total.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
1911...	90,153	314,128	156,948	139,813	52,769	753,811
1912...	130,545	389,411	183,771	206,055	85,589	995,371

AUSTRALIAN TOPS FOR JAPAN.

THE Japanese woolen industry grows apace. It embodies one of the awakened national ambitions of the island empire. Australia is the convenient chief source of supply of materials for the Japanese woolen mills. The "Wool Record" of Bradford, England, says of this expanding commerce :

The figures show a significant increase in the exports to Japan ; 3,181,851 pounds were exported during the twelve months ending February 28, 1913. Of this quantity Japan took 2,809,232 pounds or 1,170,172 pounds more than during the preceding twelve months. It will be a fair basis to say that 200 pounds of tops equal a bale of greasy wool. We must add, therefore, 14,000 bales of wool to the 23,000 bales purchased in open market already this season. This makes Japan's purchases up to 37,000 bales.

The tops taken during the preceding twelve months equal about 8,000 bales of greasy wool. Japan's purchases, on the basis of greasy wool, would equal close upon 32,000 bales. There is a substantial increase of 5,000 bales disclosed in the operations of season 1912-1913. As the export figures are of considerable interest, I give them in detail.

EXPORT OF TOPS FROM NEW SOUTH WALES.

	March 1, 1911, to Feb. 29, 1912.	March 1, 1912, to Feb. 28, 1913.	
	<i>Lbs.</i>	<i>Lbs.</i>	
United Kingdom	55,481	114,621	59,140*
India	4,655	40,449	35,794*
Belgium	86,155	177,664	91,509*
Germany	659,096	11,958	647,138**
Italy	124,540	27,927	96,613**
Japan	1,629,060	2,809,232	1,170,172*
	<u>2,558,987</u>	<u>3,181,851</u>	

* Increase.

** Decrease.

**QUARTERLY REPORT OF THE BOSTON WOOL MARKET
FOR JANUARY, FEBRUARY AND MARCH, 1913.**

DOMESTIC WOOLS. (GEORGE W. BENEDICT.)

	1913.			1912.
	January.	February.	March.	March.
OHIO, PENNSYLVANIA, AND WEST VIRGINIA.				
(WASHED.)				
XX and above	31 @ 32	30 @ 31	31 @ 32	29 @ 30
X	29 @ 30	28 @ 29	28 @ 29	28 @ 29
Blood	37 @ 38	36 @ 37	35 @ 36	34 @ 35
"	37 @ 38	36 @ 37	35 @ 36	33 @ 34
"	37 @ 38	36 @ 37	35 @ 36	35 @ 36
Fine Delaine	34 @ 34½	33 @ 34	31 @ 32	31 @ 32
(UNWASHED.)				
Fine	23 @ 24	23 @ 24	22 @ 23	21½ @ 22
Blood	29 @ 30	29 @ 30	28 @ 29	27 @ 28
"	30 @ 31	30 @ 31	29 @ 30	27 @ 28
"	30 @ 31	30 @ 31	29 @ 30	28 @ 29
Fine Delaine	28 @ 28½	27 @ 28	25 @ 26	26 @ 26½
MICHIGAN, WISCONSIN, NEW YORK, ETC.				
(WASHED.)				
Fine	36 @ 37	35 @ 36	34 @ 35	33 @ 34
Blood	36 @ 37	35 @ 36	34 @ 35	32 @ 33
"	36 @ 37	35 @ 36	34 @ 35	33½ @ 34½
Fine Delaine	33 @ 33½	32 @ 33	30 @ 31	30 @ 31
(UNWASHED.)				
Fine	22 @ 23	22 @ 23	21 @ 22	20 @ 20½
Blood	28 @ 29	28 @ 29	27 @ 28	26½ @ 27½
"	29 @ 30	29 @ 30	28 @ 29	26½ @ 27½
"	29 @ 30	29 @ 30	28 @ 29	27 @ 28
Fine Delaine	26 @ 26½	25 @ 26	23 @ 24	24½ @ 25½
KENTUCKY AND INDIANA.				
(UNWASHED.)				
Blood	31 @ 32	31 @ 32	30 @ 31	27½ @ 28
"	31 @ 32	31 @ 32	30 @ 31	28 @ 28½
Braid	26 @ 27	26 @ 27	26 @ 27	24 @ 25
MISSOURI, IOWA, AND ILLINOIS.				
(UNWASHED.)				
Blood	29 @ 29½	29 @ 29½	28 @ 29	26 @ 27
"	29 @ 29½	29 @ 29½	28 @ 29	27 @ 27½
Braid	26 @ 27	26 @ 27	25 @ 26	24 @ 24½
TEXAS.				
(SCOURD BASIS.)				
12 months, fine, and fine medium . .	60 @ 62	60 @ 62	58 @ 60	53 @ 55
6 to 8 months, fine	53 @ 55	53 @ 54	52 @ 53	46 @ 48
12 months, medium	53 @ 55	53 @ 54	52 @ 53	48 @ 50
6 to 8 months, medium	47 @ 50	47 @ 48	45 @ 46	41 @ 43
Fall, fine and fine medium	48 @ 50	48 @ 50	46 @ 48	41 @ 43
" medium	43 @ 45	43 @ 45	42 @ 44	40 @ 41
CALIFORNIA.				
(SCOURD BASIS.)				
Free, 12 months	52 @ 53	51 @ 52	50 @ 51	48 @ 50
" 6 to 8 months	46 @ 47	46 @ 47	45 @ 46	43 @ 44
Fall, free	45 @ 46	45 @ 46	44 @ 45	38 @ 40
" defective	38 @ 42	37 @ 40	36 @ 39	32 @ 34
TERRITORY WOOL: Montana, Wyoming, Utah, Idaho, Oregon, etc.				
(SCOURD BASIS.)				
Staple, fine and fine medium	65 @ 66	63 @ 65	58 @ 60	60 @ 62
" medium	60 @ 62	60 @ 61	55 @ 57	55 @ 56
Clothing, fine and fine medium . . .	59 @ 60	58 @ 59	53 @ 55	50 @ 53
" medium	56 @ 57	55 @ 56	50 @ 52	48 @ 50
NEW MEXICO, (Spring.)				
(SCOURD BASIS.)				
No. 1	56 @ 57	55 @ 56	51 @ 52	48 @ 50
No. 2	50 @ 52	50 @ 51	46 @ 47	44 @ 45
No. 3	44 @ 45	44 @ 45	42 @ 43	38 @ 40
No. 4	41 @ 43	40 @ 42	38 @ 40	35 @ 37
NEW MEXICO, (Fall.)				
(SCOURD BASIS.)				
No. 1				
No. 2				
No. 3				
No. 4				
GEORGIA AND SOUTHERN.				
Unwashed	28 @ 30	28 @ 30	27 @ 28	22½ @ 23½

DOMESTIC WOOL.

MARCH 31, 1913.

The market since the first of the year has been generally disappointing and the unexpected has again happened in the strike of the garment makers, which has prevailed for several weeks in all of the large eastern centers.

The heavy weight season started out with a good volume of business which augured well for a satisfactory wool market, but the above-mentioned strike has prevented the jobbers from getting their goods made up and therefore substantial orders were canceled, with the result that many mills were obliged to curtail production and this has reacted on the wool market and prices have declined in consequence.

Medium grades have held up fairly well as the supply is very light. Fine delaines have been neglected throughout the season and have naturally shown considerable weakness. Fine and fine medium territory wools have declined since the first of the year from 8 to 10 per cent. This is partly due to the fear of severe tariff cuts, the effects of which are beginning to be discounted.

The new clip will soon be ready for market and is likely to move slowly until the future is more clearly defined regarding the new tariff bill, which will be considered at the extra session of Congress early in April.

GEORGE W. BENEDICT.

PULLED WOOLS. (*Scoured basis.*) (W. A. BLANCHARD.)

	1913.			1912.
	Jan.	Feb.	March.	March.
Extra, and Fine A	57 $\frac{a}{g}$ 60	56 $\frac{a}{g}$ 59	55 $\frac{a}{g}$ 58	52 $\frac{a}{g}$ 58
A Super	52 $\frac{a}{g}$ 54	50 $\frac{a}{g}$ 53	48 $\frac{a}{g}$ 52	47 $\frac{a}{g}$ 50
B Super	47 $\frac{a}{g}$ 52	46 $\frac{a}{g}$ 50	45 $\frac{a}{g}$ 48	45 $\frac{a}{g}$ 48
C Super	38 $\frac{a}{g}$ 42	38 $\frac{a}{g}$ 40	37 $\frac{a}{g}$ 40	35 $\frac{a}{g}$ 40
Fine Combing	56 $\frac{a}{g}$ 60	55 $\frac{a}{g}$ 58	55 $\frac{a}{g}$ 57	52 $\frac{a}{g}$ 57
Medium Combing	52 $\frac{a}{g}$ 55	52 $\frac{a}{g}$ 54	51 $\frac{a}{g}$ 53	47 $\frac{a}{g}$ 50
Low Combing	48 $\frac{a}{g}$ 50	48 $\frac{a}{g}$ 50	47 $\frac{a}{g}$ 49	42 $\frac{a}{g}$ 45
California Extra	53 $\frac{a}{g}$ 57	52 $\frac{a}{g}$ 56	52 $\frac{a}{g}$ 55	50 $\frac{a}{g}$ 55

PULLED WOOLS.

Depressing conditions prevailed throughout the quarter and dull business with steadily shrinking values resulted. Confident expectations based upon the light stock of wool carried over from last year were blighted by the garment makers' strike, which was of wide extent and long protracted. Manufacturers failing to get orders for goods curtailed their purchases of wool, and a hand-to-mouth business followed. The call for an extra session of Congress for tariff revision with intimations of a drastic cut in "Schedule K" had a disastrous effect upon trade as the quarter closed.

Fine A's and AA's were in better demand than lower grades and showed less decline. A large sale of New York B super in February to a top-maker on a reported scoured basis of 47 cents was a feature of the month's business. Transactions were generally on a small scale and concessions were privately made in many instances.

W. A. BLANCHARD.

FOREIGN WOOLS. (MAUGER & AVERY.)

	1913.			1912.
	Jan.	Feb.	March.	March.
Australian Combing:				
Choice	41 @ 44	41 @ 44	41 @ 44	40 @ 43
Good	39 @ 40	39 @ 40	39 @ 40	38 @ 39
Average	36 @ 38	36 @ 38	36 @ 38	34 @ 36
Australian Clothing:				
Choice	41 @ 44	41 @ 44	41 @ 44	43 @ 44
Good	40 @ 41	40 @ 41	40 @ 41	39 @ 40
Average	38 @ 39	38 @ 39	38 @ 39	36 @ 38
Sydney and Queensland:				
Good Clothing	42 @ 44	42 @ 44	42 @ 44	41 @ 43
Good Combing	40 @ 43	40 @ 43	40 @ 43	40 @ 43
Australian Crossbred:				
Choice	40 @ 43	40 @ 43	40 @ 43	40 @ 43
Average	35 @ 38	35 @ 38	35 @ 38	35 @ 36
Australian Lambs:				
Choice	42 @ 45	42 @ 45	42 @ 45	43 @ 45
Good	39 @ 40	39 @ 40	39 @ 40	39 @ 40
Good Defective	37 @ 38	37 @ 38	37 @ 38	36 @ 38
Cape of Good Hope:				
Choice	34 @ 36	34 @ 36	34 @ 36	34 @ 36
Average	30 @ 33	30 @ 33	30 @ 33	32 @ 33
Montevideo:				
Choice	36 @ 38	36 @ 38	36 @ 38	34 @ 35
Average	33 @ 35	33 @ 35	33 @ 35	32 @ 33
Crossbred, Choice	36 @ 39	36 @ 39	36 @ 39	34 @ 37
English Wools:				
Sussex Fleece	42 @ 43	42 @ 43	42 @ 43	41 @ 42
Shropshire Hogs	41 @ 42	41 @ 42	41 @ 42	39 @ 40
Yorkshire Hogs	37 @ 39	37 @ 39	37 @ 39	36 @ 37
Irish Selected Fleece	39 @ 40	39 @ 40	39 @ 40	35 @ 36
Carpet Wools:				
Scotch Highland, White	23 @ 25	23 @ 25	23 @ 25	23 @ 24
East India, 1st White Joria	32 @ 34	32 @ 34	32 @ 34	29 @ 31
East India, White Kandahar	28 @ 30	28 @ 30	28 @ 30	26 @ 28
Donskoi, Washed, White	34 @ 35	34 @ 35	34 @ 35	33 @ 35
Aleppo, White	34 @ 35	34 @ 35	34 @ 35	33 @ 34
China Ball, White	26 @ 28	26 @ 28	26 @ 28	23 @ 25
“ “ No. 1, Open	24 @ 26	24 @ 26	24 @ 26	22 @ 24
“ “ No. 2, Open	19 @ 20	19 @ 20	19 @ 20	15 @ 17

FOREIGN WOOL.

The approach of a special session of Congress to consider the passage of a tariff bill reducing duties on wool and its manufactures, as well as upon many other schedules, has induced caution upon the part of manufacturers, and their purchases of foreign wools have been confined largely to such qualities as they were in immediate need of.

East India wools have been in steady, though slightly reduced, demand.

Low crossbreds, especially of luster character, have been inquired for, as well as both combing and filling wools, for carpet purposes.

The lower cost of medium domestic wools has checked the sale of English wools, unless for special effect in goods. The probabilities are that the demand for foreign wools will be curtailed until after the adjournment of Congress.

MAUGER & AVERY.

Boston, April 3, 1913.

BULLETIN

OF THE

National Association of Wool Manufacturers

A QUARTERLY MAGAZINE

DEVOTED TO THE INTERESTS OF THE NATIONAL WOOL INDUSTRY.

VOL. XLIII.]

BOSTON, SEPTEMBER, 1913.

[No. III.]

THE SIMMONS-UNDERWOOD TARIFF A LAW.

A THOROUGH REVENUE-ONLY MEASURE, MADE STILL MORE
EXTREME BY THE SENATE.

THE Simmons-Underwood tariff bill is now the law of the land. It comes into force under exceptionally favoring conditions, with a fair degree of prosperity existing in most of the industries of America and a high degree of prosperity existing in Europe. No financial panic is in sight; there are no unusual disturbances anywhere. If the new tariff law is not a success under these circumstances, it must be because it is fundamentally wrong — because it is excessively low in its rates and based on an unsound principle.

If the bill fails, its authors can have no such excuse as that which has been exploited so persistently to extenuate the Gorman-Wilson tariff law of 1894. There had been grave financial unrest in the preceding year, and to this unfortunate condition, felt throughout the world, but ended soon after that earlier Democratic tariff became a law, the evil results of Gorman-Wilsonism have been attributed by those responsible for its enactment.

The Simmons-Underwood tariff finds the American people, or most of them, actively engaged in work or business. In the textile and other industries, particularly susceptible to sharp tariff reduction, there has been much nervousness ever since the new tariff bill was introduced. But taking the country by and large trade is good, and the outlook would be

wholly cheerful but for the doubt and uncertainty induced by the first real tariff for revenue only which this country has had for more than fifty years.

HOSTILE TO ALL PROTECTION.

If all this general prosperity is lessened or destroyed by the new tariff policy, the responsibility for it will be straight and certain in the eyes of all men. The new tariff has been framed by statesmen who have been taught in the school of John C. Calhoun and his successors, that protection is unconstitutional and iniquitous. Throughout the debate upon the bill the men in charge of it have repeatedly asserted that it was prepared without any regard whatever to protecting and encouraging American industries — that the one thought of the authors was how best to create an adequate revenue. This view embodies the opinion of President Wilson himself. Mr. Wilson before the Tariff Commission of 1882 — a young school-teacher and lawyer in a Southern town — avowed himself an out-and-out free trader. Such he has always remained. A Southern man, he is very much more hostile to the protective system than ever was a Northern Democrat like Grover Cleveland. Mr. Wilson would destroy the system root and branch — not at once by any sudden blow, but as quickly and as safely as the task could be accomplished.

When as a candidate for the Presidency he announced that he would make a reduction of the tariff without injuring any legitimate industry, and later when as President he promised that no legitimate industry should be injured, it was with the mental reservation which always lurks in the Southern free trade mind that tariff-protected industries are never legitimate — that no business that requires the encouragement of tariff duties has any right to exist in the United States.

CHANGES IN CONFERENCE.

The new tariff bill left the Senate even more distinctively a tariff-for-revenue-only measure than when it left the House

of Representatives. The Senate Committee on Finance had made some reductions; the radical Democratic majority in the Senatorial caucus had forced many others. In the woolen schedule tops and yarns were cut by the Senate from the House rates of 15 and 20 to 5 and 15 per cent. Lower-priced woolen blankets were put on the free list. In the Conference Committee the rates on tops and yarns were raised to 8 and 18 per cent, and the lower-priced woolen blankets were again made dutiable.

The National Association of Wool Manufacturers, through briefs presented to members of the committee, fought hard for these changes and for other increases, some of which were made.

These were improvements at the hands of the Conference Committee. On the other hand, it was an unfavorable change that reëstablished a duty on the hair of the Angora goat and alpaca, which the House had made dutiable at 20 per cent and the Senate had made free like wool. On these raw materials of manufacture, which ought to have been free if wool were free, the Conference Committee agreed to a rate of 15 per cent, and then arranged duties on tops, yarns, cloths, and plushes made of mohair or alpaca which were altogether inadequate and unjust to an important branch of our manufacturing industry.

The imposition of any duty upon the hair of the Angora goat while the fleece of the sheep is free can be explained only by the manifest fact that the South and Southwest dominate the policy of the present majority party in Washington, and that under political conditions as they now exist Texas is far more potent than any of the great manufacturing or agricultural communities of the North and Northwest.

A duty on tops of 8 per cent, on yarns of 18 per cent and on cloths and dress goods of 35 per cent marks in the woolen industry a return to the fiscal conditions that prevailed under the Southern Democratic tariffs for revenue only before the Civil War. In the Gorman-Wilson tariff of 1894, with raw wool, as now, free of duty, the rate on tops was 20 per cent, on yarns 30 and 40 per cent, and on cloths and dress goods

40 and 50 per cent — yet the Gorman-Wilson law was simply disastrous to the industry. The American wool manufacture has strengthened in the interval, but the wages of its employees have increased far beyond anything known in competing countries abroad, and there can be no question that the Simmons-Underwood duties are a severer test of the industry as a whole than anything known in the experience of the men who now conduct the wool manufacturing business of this country.

REQUESTS OF THE NATIONAL ASSOCIATION.

The National Association of Wool Manufacturers, through formal briefs presented to the Conference Committee in Washington, asked for an increase in the duty on tops and yarns above the Senate rate. Some increase was granted, as has been said. The Senate had been asked further to leave the House wording of the basket clause of the cotton schedule so that manufactures in part of wool but of which cotton was the component material of chief value should fall within this paragraph and be dutiable at 30 per cent. This also was done. The Association protested to the Conference Committee against the placing of blankets wholly or in chief value of wool, valued at less than 40 cents a pound, on the free list, without any protection at all. These blankets were removed from the free list and restored to the dutiable list at 25 per cent ad valorem, as had been suggested. A very earnest request was made that the provision of the Senate bill reducing the duty on flannels valued at above 50 cents a pound to 25 per cent be amended and the House rate of 35 per cent be restored. The Conference Committee fixed the rate at the compromise figure of 30 per cent. Woolen hosiery, dutiable in the House bill at 35 per cent, was raised in the Senate bill to 50 per cent, but again reduced to 40 per cent, where it stands in the new law. On this subject also strong representations were made by the Association in arguments presented to the Committee on Finance and the Conference Committee. Cloth in chief value of cattle hair or horse hair was made dutiable in the Senate bill at 25 per cent, and our

effort to secure an increase on these fabrics did not prevail, the House conferees siding with the Senate on this subject.

As agreed to in the Conference Committee, free wool becomes effective on December 1, 1913, and the reduced duties on goods January 1, 1914. The interval of one month between these duties is of very little practical value to manufacturers. A period of six months had been asked for, as was granted in the Gorman-Wilson law in 1894. This should have again been granted.

The new tariff, so far as we are aware, is approved by not one of the one thousand woolen manufacturers in the United States. It threatens serious disaster to the industry as a whole. But it is the part of courage and wisdom to meet the issue frankly, to give the new law a fair and thorough trial, and to make the stoutest possible resistance to the intensified foreign competition that is now inevitable. There is not the slightest doubt that all this will be done.

WINTHROP L. MARVIN.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, ETC.,

Of Bulletin of the National Association of Wool Manufacturers, published quarterly at 683 Atlantic Avenue, Boston, Mass., required by the Act of August 24, 1912.

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There are no bonds, mortgages or securities of any other kind.

WINTHROP L. MARVIN,

Editor.

Sworn to and subscribed before me this 23rd day of July, 1913.

WILLARD A. CURRIER,

Notary Public.

(*My commission expires May 15, 1914.*)

IN THE SENATE AND CONFERENCE.

FINAL CONSIDERATION OF THE NEW TARIFF MEASURE —
TEXT OF THE WOOL AND WOOLEN SCHEDULE
AND PROPOSED SUBSTITUTES.

In the Bulletin for June, 1913, there appeared a record of the progress of the Underwood tariff bill so far as the wool and woollen schedule was concerned, from the introduction of the measure by Chairman Underwood at the opening of the special session of the 63d Congress, April 7, to the revision of the bill by the Senate Committee on Finance and its submission to the Democratic Senatorial caucus for approval, June 20, 1913.

For the purpose of ready comparison, the wool and woollen schedule of the bill as it left the Committee on Finance is republished here as follows:

THE FINANCE COMMITTEE SCHEDULE.

Text of the Bill as Reported by the Senate Finance Committee to the Democratic Senatorial Caucus.

All words stricken out of the House bill are enclosed in parentheses, and the Finance Committee's new provisions are printed in italics.

SCHEDULE K — WOOL AND MANUFACTURES OF.

295. — Combed wool or tops and roving or roping made wholly or in part of wool or camel's hair, and on other wool and hair which have been advanced in any manner or by any process of manufacture beyond the washed or scoured condition, not specially provided for in this section, 15 per centum ad valorem.

296. — Yarns made wholly or in chief value of wool, 20 per centum ad valorem.

297. — Cloths, knit fabrics, felts not woven, and all manufactures of every description made, by any process, wholly or in chief value of wool, not specially provided for in this section, 35 per centum ad valorem; *cloths if made in chief value*

of cattle hair or horse hair, not specially provided for in this section, 25 per centum ad valorem; plushes, velvets, and all other pile fabrics, cut or uncut, woven or knit, whether or not the pile covers the entire surface, made wholly or in chief value of wool, and articles made wholly or in chief value of such plushes, velvets, and other pile fabrics, 40 per centum ad valorem; stockings, hose and half hose, made on knitting machines or frames, composed wholly or in chief value of wool, not specially provided for in this section, 20 per centum ad valorem; stockings, hose and half hose, selvedged, fashioned, narrowed, or shaped wholly or in part by knitting machines or frames, or knit by hand, including such as are commercially known as seamless stockings, hose and half hose, and clocked stockings, hose and half hose, all of the above, composed wholly or in chief value of wool, if valued at not more than 70 cents per dozen pairs, 30 per centum ad valorem; if valued at more than 70 cents per dozen pairs, 50 per centum ad valorem; press cloth composed of camel's hair, 15 per centum ad valorem.

298. — Blankets and flannels, composed wholly or in chief value of wool, 25 per centum ad valorem (: flannels composed wholly or in chief value of wool, valued at above 50 cents per pound, 35 per centum ad valorem).

299. — Women's and children's dress goods, coat linings, Italian cloths, bunting, and goods of similar description and character, composed wholly or in chief value of wool, and not specially provided for in this section, 35 per centum ad valorem.

300. — Clothing, ready made, and articles of wearing apparel of every description, including shawls whether knitted or woven, and knitted articles of every description made up or manufactured wholly or in part, and not specially provided for in this section, composed wholly or in chief value of wool, *or of wool and india rubber*, 35 per centum ad valorem.

301. — Webbing, suspenders, braces, bandings, beltings, bindings, cords, cords and tassels, and ribbons: any of the foregoing made of wool or of which wool or wool and india rubber are the component materials of chief value, 35 per centum ad valorem.

302. — Aubusson, Axminster, moquette, and chenille carpets, figured or plain, and all carpets or carpeting of like character or description, *not specially provided for in this section*, 35 per centum ad valorem.

303. — Saxony, Wilton, and Tournay velvet carpets, figured or plain, and all carpets or carpeting of like character or description, 30 per centum ad valorem.

304. — Brussels carpets, figured or plain, and all carpets or carpeting of like character or description, 25 per centum ad valorem.

305. — Velvet and tapestry velvet carpets, figured or plain, printed on the warp or otherwise, and all carpets or carpeting of like character or description, 30 per centum ad valorem.

306. — Tapestry Brussels carpets, figured or plain, and all carpets or carpeting of like character or description, printed on the warp or otherwise, 20 per centum ad valorem.

307. — Treble ingrain, three-ply, and all-chain Venetian carpets, 20 per centum ad valorem.

308. — Wool Dutch and two-ply ingrain carpets, 20 per centum ad valorem.

309. — Carpets of every description, woven whole for rooms, and Oriental, Berlin, Aubusson, Axminster, and similar rugs, 50 per centum ad valorem.

310. — Druggets and bookings, printed, colored, or otherwise, 20 per centum ad valorem.

311. — Carpets and carpeting of wool (, flax,) or cotton, or composed in part of (any) *either* of them, not specially provided for in this section, and on mats, matting, and rugs of cotton, 20 per centum ad valorem.

312. — Mats, rugs for floors, screens, covers, hassocks, bed-sides, art squares, and other portions of carpets or carpeting, (made) *composed* wholly or in (part) *chief value* of wool, and not specially provided for in this section, shall be subjected to the rate of duty herein imposed on carpets or carpeting of like character or description.

313. — Whenever in this section the word “wool” is used in connection with a manufactured article of which it is a component material, it shall be held to include wool or hair of the sheep, camel, or other like animals, whether manufactured by the woollen, worsted, felt, or any other process.

(**314.** — Hair of the Angora goat, alpaca, and other like animals, and all hair on the skin of such animals, 20 per centum ad valorem.)

315. — Tops made from the hair of the Angora goat, alpaca, and other like animals, (25) 15 per centum ad valorem.

316. — Yarns made of the hair of the Angora goat, alpaca, and other like animals, (30) 20 per centum ad valorem.

317. — Cloth and all manufactures of every description made of the hair of the Angora goat, alpaca, and other like animals, not specially provided for in this section, (40) 35 per centum ad valorem.

318. — Plushes, velvets, and all other pile fabrics, cut or uncut, woven or knit, whether or not the pile covers the entire surface, made wholly or partly *of wool or* of the hair of the Angora goat, alpaca, and other like animals, and articles made wholly or in chief value of such plushes or velvets, (50) 40 per centum ad valorem.

Paragraph 396 provides that where two or more rates of duty may be applicable, the highest rate shall be levied, and also explains the meaning of the words "component material of chief value." The paragraph follows :

396. — That each and every imported article, not enumerated in this section, which is similar, either in material, quality, texture, or the use to which it may be applied, to any article enumerated in this section as chargeable with duty, shall pay the same rate of duty which is levied on the enumerated article which it most resembles in any of the particulars before mentioned ; and if any nonenumerated article equally resembles two or more enumerated articles on which different rates of duty are chargeable, there shall be levied on such nonenumerated article the same rate of duty as is chargeable on the article which it resembles paying the highest rate of duty ; and on articles not enumerated, manufactured of two or more materials, the duty shall be assessed at the highest rate at which the same would be chargeable if composed wholly of the component material thereof of chief value ; and the words "component material of chief value," wherever used in this section, shall be held to mean that component material which shall exceed in value any other single component material of the article ; and the value of each component material shall be determined by the ascertained value of such material in its condition as found in the

article. If two or more rates of duty shall be applicable to any imported article, it shall pay duty at the highest of such rates.

FREE LIST.

652. — Wool of the sheep, hair of the camel, *Angora goat, alpaca*, and other like animals, *not specially provided for in this section*, and all wools and hair on the skin of such animals, and paper twine for binding any of the foregoing.

653. — Wool wastes: All noils, top waste, card waste, slubbing waste, roving waste, ring waste, yarn waste, bur waste, thread waste, garnetted waste, shoddies, mungo, flocks, wool extract, carbonized wool, carbonized noils, and all other wastes not specially provided for in this section.

The phraseology of the tariff law as applied to fabrics made of mixed materials has been changed so that it now reads "made wholly or in chief value of wool," whereas heretofore the wording has been "made wholly or in part of wool." This change has been looked upon with a good deal of anxiety by wool manufacturers. It appears, however, that in the cotton schedule, Paragraph 271, such goods if composed in chief value of cotton will be dutiable at 30 per cent, or 5 per cent less than if made "wholly or in chief value of wool." The paragraph is as follows:

271. — All articles made from cotton cloth, whether finished or unfinished, and all manufactures of cotton, or of which cotton is the component material of chief value, not specially provided for in this section, 30 per centum ad valorem.

THE SCHEDULE AS REVISED BY THE CAUCUS.

The bill was under consideration by the Democratic Senatorial caucus from June 20 to July 7, and the caucus ordered a considerable number of changes, most of them of a somewhat radical nature, in the character of further revision downward. The wool and woollen schedule of the Underwood bill as it emerged from the Senatorial caucus was as

follows — all words stricken out of the House bill being enclosed in brackets, and the new provisions made by the Senate Finance Committee being printed in italics:

SCHEDULE K—WOOL AND MANUFACTURES OF.

295. — Combed wool or tops and roving or roping made wholly or in part of wool or camel's hair, and on other wool and hair which have been advanced in any manner or by any process of manufacture beyond the washed or scoured condition, not specially provided for in this section, [15] 5 per centum ad valorem.

296. — Yarns made wholly or in chief value of wool, [20] 15 per centum ad valorem.

297. — Cloths, knit fabrics, felts not woven, and all manufactures of every description made, by any process, wholly or in chief value of wool, not specially provided for in this section, 35 per centum ad valorem: *cloths if made in chief value of cattle hair or horse hair, not specially provided for in this section, 25 per centum ad valorem: stockings, hose and half hose, made on knitting machines or frames, composed wholly or in chief value of wool, not specially provided for in this section, 20 per centum ad valorem: stockings, hose and half hose, selvedged, fashioned, narrowed, or shaped wholly or in part by knitting machines or frames, or knit by hand, including such as are commercially known as seamless stockings, hose and half hose, and clocked stockings, hose and half hose, all of the above, composed wholly or in chief value of wool, if valued at not more than \$1.20 per dozen pairs, 30 per centum ad valorem: if valued at more than \$1.20 per dozen pairs, 50 per centum ad valorem: press cloth composed of camel's hair, 10 per centum ad valorem.*

298. — Blankets, *not specially provided for in this section*, and flannels, composed wholly or in chief value of wool, 25 per centum ad valorem [; flannels composed wholly or in chief value of wool, valued at above 50 cents per pound, 35 per centum ad valorem].

299. — Women's and children's dress goods, coat linings, Italian cloths, bunting, and goods of similar description and character, composed wholly or in chief value of wool, and not specially provided for in this section, 35 per centum ad valorem.

300. — Clothing, ready made, and articles of wearing apparel of every description, including shawls whether knitted or woven, and knitted articles of every description made up or manufactured wholly or in part, and not specially provided for in this section, composed wholly or in chief value of wool, or of wool and india rubber, 35 per centum ad valorem.

301. — Webbing, suspenders, braces, bandings, beltings, bindings, cords, cords and tassels, and ribbons; any of the foregoing made of wool or of which wool or wool and india rubber are the component materials of chief value, 35 per centum ad valorem.

302. — Aubusson, Axminster, moquette, and chenille carpets, figured or plain, and all carpets or carpeting of like character or description, *not specially provided for in this section*, 35 per centum ad valorem.

303. — Saxony, Wilton, and Tournay velvet carpets, figured or plain, and all carpets or carpeting of like character or description, 30 per centum ad valorem.

304. — Brussels carpets, figured or plain, and all carpets or carpeting of like character or description, 25 per centum ad valorem.

305. — Velvet and tapestry velvet carpets, figured or plain, printed on the warp or otherwise, and all carpets or carpeting of like character or description, 30 per centum ad valorem.

306. — Tapestry Brussels carpets, figured or plain, and all carpets or carpeting of like character or description, printed on the warp or otherwise, 20 per centum ad valorem.

307. — Treble ingrain, three-ply, and all-chain Venetian carpets, 20 per centum ad valorem.

308. — Wool Dutch and two-ply ingrain carpets, 20 per centum ad valorem.

309. — Carpets of every description, woven whole for rooms, and Oriental, Berlin, Aubusson, Axminster, and similar rugs, 50 per centum ad valorem.

310. — Druggets and bookings, printed, colored, or otherwise, 20 per centum ad valorem.

311. — Carpets and carpeting of wool, [flax,] or cotton, or composed in part of [any] *either* of them, not specially

provided for in this section, and on mats, matting, and rugs of cotton, 20 per centum ad valorem.

312. — Mats, rugs for floors, screens, covers, hassocks, bed-sides, art squares, and other portions of carpets or carpeting, [made] *composed* wholly or in [part] *chief value* of wool, and not specially provided for in this section, shall be subjected to the rate of duty herein imposed on carpets or carpeting of like character or description.

313. — Whenever in this section the word “wool” is used in connection with a manufactured article of which it is a component material, it shall be held to include wool or hair of the sheep, camel, or other like animals, whether manufactured by the woolen, worsted, felt, or any other process.

[**314.** — Hair of the Angora goat, alpaca, and other like animals, and all hair on the skin of such animals, 20 per centum ad valorem.]

315. — Tops made from the hair of the Angora goat, alpaca, and other like animals, [25] 5 per centum ad valorem.

316. — Yarns made of the hair of the Angora goat, alpaca, and other like animals, [30] 15 per centum ad valorem.

317. — Cloth and all manufactures of every description made of the hair of the Angora goat, alpaca, and other like animals, not specially provided for in this section, [40] 35 per centum ad valorem.

318. — Plushes, velvets, and all other pile fabrics, cut or uncut, woven or knit, whether or not the pile covers the entire surface, *and woven-figured upholstery goods*, made wholly or [partly] *in chief value of wool* or of the hair of the Angora goat, alpaca, [and] *or* other like animals, and articles made wholly or in chief value of such plushes or velvets, [50] 40 per centum ad valorem.

318 $\frac{1}{2}$. — *The provisions of this schedule (K) shall be effective on and after the first day of January, nineteen hundred and fourteen.*

FREE LIST.

427 $\frac{1}{2}$. — *Blankets, composed wholly or in chief value of wool, valued at less than 40 cents per pound.*

652. — Wool of the sheep, hair of the camel, *Angora goat*, *alpaca*, and other like animals, *not specially provided for in this section*, and all wools and hair on the skin of such animals, *and paper twine for binding any of the foregoing*. *This paragraph shall be effective on and after the first day of December, nineteen hundred and thirteen.*

653. — Wool wastes: All noils, top waste, card waste, slubbing waste, roving waste, ring waste, yarn waste, bur waste, thread waste, garnetted waste, shoddies, mungo, flocks, wool extract, carbonized wool, carbonized noils, and all other wastes not specially provided for in this section. *This paragraph shall be effective on and after the first day of December, nineteen hundred and thirteen.*

Several important changes were made in the proposed law by the Finance Committee or the Senatorial Caucus.

The duty on tops was reduced to 5 per centum, and on yarns the duty was changed from 20 to 15 per centum.

Provision was made in paragraph 297 for cloths made in chief value of cattle or horse hair, also for stockings, etc.

The words in brackets in the blanket paragraph, No. 298, were stricken out, and a paragraph, No. 427½, was inserted, which would allow blankets valued at less than 40 cents per pound, if composed wholly or in part of wool, to come in free of duty, while blankets made wholly or in chief value of cotton would be dutiable at 25 per centum under paragraph 269, a portion of which is as follows: "269. Towels, quilts composed of two fabrics quilted, blankets, polishing cloths," etc.; "any of the foregoing made of cotton or of which cotton is the component material of chief value and not embroidered nor in part of lace and not otherwise provided for, 25 per centum ad valorem."

Wool and wastes were made free on and after December 1, 1913, while the new duties on goods were made to take effect on the first of January following.

THE DEBATE IN THE SENATE.

Chairman Simmons reported the revised bill to the Senate on July 11 and it remained there under consideration for

almost two months. It had been anticipated earlier in the session that one or two Democratic Senators from wool-growing States of the Rocky Mountain region might oppose the bill, but not one did so. Indeed, not only did all the Rocky Mountain Democratic Senators support the measure in its final stage, but several of them in set speeches justified their vote for free wool by the plea that a duty on wool was an ineffective and unsound policy, or that the interests of the wool growers ought not to be allowed to weigh against the assumed welfare of 95,000,000 people.

Senator Myers, of Montana, on August 4th declared:

The people of Montana are not wailing about being discriminated against by the free-wool clause of the pending tariff bill. There are 500,000 people in Montana. I do not believe that there are more than 1,000 men in the State who are commercially engaged in the wool-growing business. I do not believe there are that many. Some put the number at 500; others put it at 300. To be more than liberal, I will allow 1,000. I do not believe that their families and employees together with the wool growers, all together, amount to as many as 5,000 people; but I will put the estimate at that liberal figure. That leaves in Montana 495,000 people who are not interested in wool growing. Let no one deceive himself into believing that these 495,000 people in Montana who do not grow wool, nor any considerable portion of them, are moaning, groaning, bewailing, and shedding tears of agonized grief because in these times of high cost of living they are to be denied the precious privilege, so dear to their hearts, of being further taxed on top of the burdens of taxation under which they are already struggling, for the benefit of a mere handful of sheepmen who long have been favored by the Government at the expense of the people.

The same hostile and contemptuous tone toward the wool growers was manifest in the speech of another Rocky Mountain Democratic Senator, Mr. Pittman, of Nevada, who said:

Now, let us see who is benefited by the sheep industry and who is injured.

Three hundred and fourteen sheep owners would be directly benefited by a duty on raw wool, by being able to

sell to the American people their product at an increased price equal to the amount of the duty.

There would be injured by such duty over 80,000 people in my State, who would be compelled to pay the increased price for their woolen goods for the purpose of granting this benefit to the 314 people.

Senator Pittman urged that instead of an advantage the wool growing industry was an actual injury to his State :

Down each side of the valleys, along the mountain ranges adjacent to these farms, come thousands upon thousands of sheep, driven by Basque shepherders and collie dogs, uprooting the vegetation, breaking down fences, destroying roads, obliterating ranges, defiling the water-courses, and driving the cattle and horses of the farms off of their natural ranges.

Senator Walsh, of Montana, also advocating free wool, urged that it would not be a misfortune to the Rocky Mountain States. This view was vigorously combatted by protectionist Senators from the Rocky Mountain region. Senator Warren, of Wyoming, spoke at great length, with his extraordinary knowledge of the subject, on behalf of the wool growers. He reviewed the growth of the sheep and wool industry in the United States, in a very important historical statement, going back to Colonial times. Senator Warren defended the wool growers against certain aspersions that had been cast upon them. He declared that in Wyoming the men who took care of the sheep were "equally as intelligent as any other class of people." He argued that if there had been anywhere a decline in the number of sheep "that is all the more reason why, if it is an industry which ought to be protected, we should protect it." He added :

Where will we be in the matter of meat if we do not raise mutton in this country? The sheep industry in this country so far has never reached the stage, admittedly on all hands, where it will pay on the wool alone or on the mutton alone, but in raising wool and mutton together we greatly

increase the mutton crop, we keep the price down, and that contributes to keeping the price of hog and cattle products down.

SENATOR LIPPITT ON THE TOP DUTY.

Senator Lippitt, of Rhode Island, urged an increase in the duty on tops. Mr. Lippitt said :

Coming back to the table upon page 643 of the Tariff Board report, to consider what it costs in this country to make a top for the processes which are considered in the table, we find that the costs in four different cases ran from 7.25 cents a pound to 7.32 cents a pound — not a great difference. But those figures do not represent the costs of all the processes necessary for turning wool into tops, and they do not represent all the conditions to-day.

A year ago, when this report first came out, I spent a very considerable amount of time in trying to satisfy myself as to what the board really reported the cost of a top to be. I found it was necessary to add to this table something for the cost of sorting, something for the interest upon the difference in the cost of a plant in this country and in Europe — because in another part of the report the board shows that that difference is about 60 per cent — something for the cost of storing and handling the raw wool and for the interest and storage charges of holding it and carrying it, something for the actual conditions under which a mill operates, and something for the increase in wages that has occurred since the report was made. The figure of 7½ cents a pound is a theoretical figure based upon the costs that the Tariff Board obtained, but edited to show the cost of a mill running full time. The woollen business is of such a character that it very seldom happens that a mill does run full time, and the actual costs cannot be taken on that theoretical supposition. The board itself makes a very elaborate exposition of this subject on a previous page, where it shows that the difference in cost that may result between a mill that runs full time and one that runs only a part of that time is, in some cases, as great as the difference between 3.24 cents a pound and 10.85 cents a pound. Those are very extreme cases, however, the lowest cost being in the case of a mill that ran overtime — more than full time — and the highest cost being in the case of a mill that ran very much less than full time.

Making the proper additions to the cost which the board gave, $7\frac{1}{2}$ cents a pound, I came to the conclusion that the Tariff Board report showed that for the kind of top that was there being considered it cost 10.91 cents a pound.

I then took occasion to ask a gentleman in Philadelphia, Mr. Walter Erben, of the Erben-Harding Company, if he would make an examination of this subject, based upon the same Tariff Board table I had used, for the purpose of seeing how his results would compare with mine. In every industry like woolen manufacturing there are certain men who become recognized among their fellow craftsmen as experts in certain directions. The very remarkable mathematical mind of Mr. Erben has made him recognized throughout the trade as an expert in the statistics of woolen manufacturing. He made a most exhaustive and elaborate calculation from the various statements that were made in the report upon the same subject. He considered the figures in three different ways, and as a result of that he reported to me that under one method of figuring the cost of making a top was 10.47 cents a pound, under another method it was 11.51 cents a pound, and under a third it was 12.3 cents a pound. He further gave me a very exhaustive statement of the cost of doing the same thing in his own mill, which showed that his cost was 11.33 cents a pound.

I also asked some other friends of mine, in New England — and this was all done without knowledge on their part of the costs of the other people — if they would make me a report upon the same subject. The firm of Hill & Nichols, well known as dealers in and manufacturers of tops, said they considered it cost 13.12 cents, and the firm of Brown & Adams said it cost 12.97 cents.

The average of all these seven costs, taken in different ways and by different people, shows that the cost of that kind of a top is 11.80 cents a pound.

We now have to consider what we know in regard to the cost of tops abroad, as represented by the Tariff Board report. The figures there are very indefinite, as would be naturally expected, and more so than the figures in regard to the American cost. The best exposition of the foreign cost is in a table given on page 644, where they show that the cost per pound in a mill on the Continent varied from 3.75 cents a pound to 4.45 cents a pound. But they say that in considering these figures it must be remembered that the mill was not running at its full capacity.

In other words, they have presented the cost of an American mill theoretically based upon its point of maximum efficiency; but they have given us the cost of a foreign mill admittedly based upon a point which is one of inefficiency. So it is manifest that that mill, on the same basis that they have used for the American cost, must have been able under similar conditions to make a wool top for a cost even lower than the figures they present. The lowest figures are 3.75 cents a pound. They do not include the other items, which, in order to arrive at a complete cost, I have been compelled to add to the table of American cost.

But the Tariff Board give additional testimony, in a way, because they repeatedly say in different forms that wool combing can be done abroad for substantially one-half what it can be done for in America.

The figures of 3.75 cents a pound which I have quoted for the continental cost as compared with 7.25 cents that the board presents as the figures for the corresponding part of the American cost show that that cost is about one-half the American cost.

We therefore have this proposition as I have arrived at it from my consideration of the matter: That it costs in this country 11.8 cents a pound to produce tops; that it costs abroad one-half of that, which is 5.9 cents a pound, or substantially 6 cents; and that the amount of protection that would have to be given to American tops to put them on a parity with foreign tops would be equivalent to 6 cents a pound.

My idea of the proper way to make a duty of that kind is to make the duty 6 cents a pound. But the duty that has been proposed is an *ad valorem* duty of 5 per cent so far as the Senate is concerned and of 15 per cent so far as the House is concerned.

We therefore, to complete our examination of this subject, have to consider what a duty of 5 per cent and 15 per cent would amount to. There are complete tables published and frequently distributed among the woolen trade which show the selling price of tops abroad for a great many years back. Taking No. 60 quality, which the Senate will understand is the English name for a quality that is suitable for spinning a No. 60 yarn, we find that the lowest price for that in recent years was 33 cents a pound in March, 1901, and 59 cents a pound in October, 1907, although it also sold in the spring of this year at substantially the same price.

Five per cent duty upon the selling price of 33 cents a pound would be 1.65 cents. On the high price of 59 cents a pound it would give a duty of 2.95 cents; and on the average of these two prices it would give a duty of 2.3 cents a pound. In other words, we find that the duty on this average of the selling price abroad of No. 60 tops would be 2.3 cents a pound, and the difference in the cost between the two is 6 cents a pound.

Let me go on. On a 15 per cent duty figured on the same prices the duty on the low price would be 4.95 cents a pound; on the high price, 8.85 cents a pound, which would be full protection and a little more; and the average would be 6.9 cents a pound. In other words, taking that grade of top, we find that the duty at 5 per cent is less than half of the protection that would be required to put the two articles on a parity here and abroad, and that a duty of 15 per cent, as proposed by the House, would be protective and give a margin of nine-tenths of a cent a pound on the average of the extreme selling prices, but would be 1.05 cents less than protective on the low foreign price.

Considering further the way it would apply to No. 56 quality, which is a little lower quality, we find that the high price is 53 cents, in June, 1906, and the low price is 31 cents, in July, 1901, and that the average of these prices is 42 cents a pound. Five per cent duty on the low price would be 1.55 cents a pound, and on the high price 2.65 cents a pound, and on the average price 2.10 cents a pound, showing that on that quality where the duties required for an equalization of cost purposes would be 6 cents a pound it is in reality only one-third that.

At a 15 per cent duty it would be 7.95 cents at the high price of the top, 4.65 cents at the low price, and 6.3 cents at the average price. In other words, on a 56 quality with the Senate committee duty there would be 4 cents a pound inducement of importation, and at the House duty of 15 per cent the foreign and domestic cost would be on a parity with a margin of safety of three-tenths of a cent a pound on the average foreign price.

Senator Lippitt argued that such an inadequate duty on tops as was proposed in the Democratic Senate bill would virtually amount to a premium on the importation of foreign wool in the form of tops, thereby directly discriminating against American wool growers.

Senator Smoot, of Utah, also spoke in strong defence of the wool-growing industry and introduced a substitute for the wool and woolen schedule of the Democratic tariff bill. The Smoot plan was as follows :

THE SMOOT SUBSTITUTE.

SCHEDULE K — WOOL AND MANUFACTURES OF.

1. All wools, hair of the camel, goat, alpaca, and other like animals shall be divided for the purpose of fixing the duties to be charged thereon into the three following classes :

2. Class one, that is to say, Merino, mestiza, metz, or metis wools or other wools of Merino blood immediate or remote, down clothing wools, and combing wools of like character with any of the preceding, including Adrianople skin wool or butcher's wool, and such as have been heretofore usually imported into the United States from Buenos Aires, New Zealand, Egypt, Australia, Cape of Good Hope, Russia, Great Britain, Canada, Morocco, and elsewhere, and down combing wools, Canada long wools, or other like wools of pure English blood, and usually known by the terms herein used, and all wools not hereinafter provided for in class three.

3. Class two, that is to say, all hair of the camel, goat, alpaca, or other like animal and Leicester, Cotswold, Lincolnshire, and similar long-combing wools of pure English blood not hereinafter provided for in class three.

4. Class three, that is to say, Donskoi, native South American, Cordova, Valparaiso, native Smyrna, Russian camel's hair, Bagdad wool, China lamb's wool, Castel Branco, and all such wools of like character as have been heretofore usually imported into the United States from Turkey, Greece, Syria, and elsewhere, excepting improved wools hereinafter provided for.

5. The standard samples of all wools or hair which are now or may be hereafter deposited in the principal custom-houses of the United States, under the authority of the Secretary of the Treasury, shall be the standards for the classification of wools and hair under this Act, and the Secretary of the Treasury is authorized to renew these standards and to

make such additions to them from time to time as may be required, and he shall cause to be deposited like standards in other customhouses of the United States when they may be needed.

6. Whenever wools of class three shall have been improved by the admixture of Merino, or English blood, from their present character, as represented by the standard samples, now or hereafter to be deposited in the principal customhouses of the United States, such improved wools shall be classified for duty as class one.

7. If any bale or package of wool or hair specified in this Act shall be entered as class three, and shall contain a greater percentage of class one wool or class two hair than does the proper standard sample thereof, then the whole bale or package shall be subject to the rate of duty chargeable on wool of class one, or hair of class two, as the case may be; and if any bale or package shall be entered by the importer, or any one duly authorized to make entry thereof, as shoddy, mungo, flocks, wool, hair, or other material of any class specified in this Act, and such bale or package shall contain any admixture of any one or more of the foregoing, or of any other material, subject to a higher rate of duty, the whole bale or package shall be dutiable at the highest rate imposed by this Act upon any article or material in said bale or package.

8. The duty on all wools of class one shall be, if scoured, 16 cents per pound; if in the grease, 15 cents per pound on the clean wool contained therein, which shall be ascertained by scouring tests made in accordance with regulations prescribed by the Secretary of the Treasury.

9. The duty on all hair and wool of class two shall be, if scoured, 14 cents per pound; if in the grease, 13 cents per pound on the clean hair or wool contained therein, which shall be ascertained by scouring tests made in accordance with regulations prescribed by the Secretary of the Treasury.

10. The duty on wools and camel's hair of class three, imported in their natural condition, shall be 7 cents per pound; if scoured, 14 cents per pound: *Provided*, That on imported wools and camel's hair of class three, upon which duty shall have been paid, used in the United States in the manufacture of carpets, druggets, bockings, mats, rugs for floors, screens, covers, hassocks, bedsides, art squares, and portions of carpets or carpeting, there shall be allowed to

the manufacturer or producer under regulations prescribed by the Secretary of the Treasury a drawback equal to ninety-nine per centum of the duty paid on such wool or hair of class three used in the manufacture of any of the foregoing articles.

11. The duty on wools or hair on the skin shall be 1 cent less per pound than is imposed upon the clean content as hereinbefore provided for such wools or hair of class one, two, or three, as the case may be, imported in their natural condition not on the skin; the quantity and value to be ascertained under such rules as the Secretary of the Treasury may prescribe.

12. Top waste and slubbing waste, 18 cents per pound.

13. Roving waste, ring waste, and garnetted waste, 14 cents per pound.

14. Noils, carbonized, 10 cents per pound; not carbonized, 8 cents per pound.

15. Thread waste, yarn waste, and all other wool waste, not specially provided for, $7\frac{1}{2}$ cents per pound.

16. Shoddy and wool extract, $7\frac{1}{2}$ cents per pound.

17. Woolen rags, flocks, and mungo, 5 cents per pound,

18. Combed wool or tops, made wholly or in part of wool, or camel's hair, ten per centum ad valorem, and, in addition thereto, 18 cents per pound on the wool or hair contained therein.

19. Wool and hair which have been advanced in any manner, or by any process of manufacture, beyond the washed or scoured condition, but less advanced than yarn, not specially provided for in this Act, $23\frac{1}{2}$ cents per pound on the wool contained therein.

20. On yarns made wholly or in part of wool, thirty per centum ad valorem and in addition thereto $19\frac{1}{2}$ cents per pound on the wool contained therein.

21. On women's and children's dress goods, coat linings, Italian cloths, buntings and goods of similar description and character, composed wholly or in part of wool, fifty per centum ad valorem, and in addition thereto $23\frac{1}{2}$ cents per pound on the wool contained therein: *Provided*, That on all

of the foregoing weighing over four ounces per square yard the duty shall be the same as imposed by this schedule on cloths.

22. On cloths, knit fabrics, flannels, felts, and all other fabrics of every description, made wholly or in part of wool, not specially provided for in this Act, valued at not more than 30 cents per pound, the duty shall be thirty-five per centum ad valorem, and in addition thereto, 12 cents per pound on the wool contained therein; valued at more than 30 cents and not more than 40 cents per pound, thirty-five per centum ad valorem, and in addition thereto, 16 cents per pound on the wool contained therein; valued at more than 40 cents and not more than 60 cents per pound, thirty-five per centum ad valorem, and in addition thereto, 23½ cents per pound on the wool contained therein; valued at more than 60 cents and not more than 80 cents per pound, forty per centum ad valorem, and in addition thereto, 23½ cents per pound on the wool contained therein; valued at more than 80 cents and not more than \$1 per pound, forty-five per centum ad valorem, and in addition thereto, 23½ cents per pound on the wool contained therein; valued at more than \$1 and not more than \$1.25 per pound, fifty per centum ad valorem, and in addition thereto, 23½ cents per pound on the wool contained therein; valued at more than \$1.25 per pound, fifty-five per centum ad valorem, and in addition thereto, 30 cents per pound on the wool contained therein: *Provided*, That in no case shall the duty on any of the foregoing articles or materials be less than that imposed by the respective paragraphs of the existing law on manufactures, of the component material of chief value, of which the goods, wares, and merchandise provided for in this paragraph are composed.

23. Blankets not exceeding three yards in length, and ready-made clothing, and articles of wearing apparel of every description (except such as are knitted), manufactured wholly or in part, including such as are composed in chief value of silk, cotton, or other vegetable fiber, or of fur, all of the foregoing composed wholly or in part of wool, and all manufactures not knitted, and not specially provided for, composed of not less than ten per centum in value of wool, sixty per centum ad valorem: *Provided*, That on blankets composed wholly or in part of wool, exceeding three yards in length, the same duty shall be paid as on cloth made wholly or in part of wool.

24. On knitted wearing apparel of every description, and all knitted articles and manufactures thereof, valued at 80 cents per pound or more, composed wholly or in chief value of wool, 23 cents per pound, and in addition thereto, forty-five per centum ad valorem; if valued at less than 80 cents per pound, 20 cents per pound and in addition thereto thirty-five per centum ad valorem: on all the foregoing composed in part of wool, but in chief value of any other material, sixty per centum ad valorem.

25. On hand-made aubusson, Axminster, oriental, and similar carpets, rugs, or other coverings for floors, made wholly or in part of wool, forty per centum ad valorem; all other carpets of every description, druggets, bookings, mats, screens, hassocks, bedsides, art squares, and portions of carpets, or carpeting, and all other coverings for floors, composed wholly or in part of wool, twenty-five per centum ad valorem.

26. Whenever in any paragraph of this Act or any schedule of the existing law the word "wool" is used in connection with a material or manufactured article of which it is a component material, it shall be held to include wool or hair of the sheep, camel, goat, alpaca, or other like animal, whether manufactured by the woolen, worsted, felt or any other process.

27. In no case shall any of the wools or wastes enumerated in sections eight, nine, ten, eleven, twelve, thirteen, fourteen, and fifteen in this schedule pay a duty more than is equivalent to an ad valorem duty of forty per centum.

28. The rates of duty provided in the paragraphs of this Act for all wools and hair shall not take effect until the first day of November, nineteen hundred and thirteen, and upon all manufactures of wools and hair on the first day of February, nineteen hundred and fourteen.

Another proposed substitute for the wool and woolen schedule of the Democratic bill was offered by Senator Catron, of New Mexico, as follows:

THE CATRON SUBSTITUTE.

295. On wool of the sheep, hair of the camel, goat, alpaca, and other like animals, all wools and hair on the skin of such animals, noils, top waste, card waste, slubbing

waste, roving waste, ring waste, yarn waste, bur waste, thread waste, garnetted waste, shoddies, mungo, flocks, wool extract, carbonized wool, carbonized noils, all other wastes, and on woollen rags composed wholly of wool or of which wool is the component material of chief value, and not specially provided for in this section, all combed wool or tops and roving or roping, made wholly of wool or camel's hair, or of which wool or camel's hair is the component material of chief value, and all wools and hair which have been advanced in any manner or by any process of manufacture beyond the washed or scoured condition, not specially provided for in this section, and all yarns made wholly of wool or of which wool is the component material of chief value, the duty shall be 35 per centum ad valorem.

296. On cloths, knit fabrics, flannels not for underwear, composed wholly of wool or of which wool is the component material of chief value; women's and children's dress goods, coat linings, Italian cloths, bunting, and goods of similar description and character; clothing, ready-made, and articles of wearing apparel of every description, including shawls, whether knitted or woven, and knitted articles of every description made up or manufactured, wholly or in part: felts not woven and not specially provided for in this section; webbings, gorings, suspenders, braces, bandings, beltings, bindings, braids, galloons, edgings, insertings, flouncings, fringes, gimps, cords, tassels, ribbons, ornaments, laces, trimmings, and articles made wholly or in part of lace, embroideries, and all articles embroidered by hand or machinery, head nets, nettings, buttons or barrel buttons, or buttons of other forms for tassels or ornaments, and manufactures of wool ornamented with beads or spangles of whatever material composed, and on all manufactures of every description made by any process of wool or of which wool is the component material of chief value, whether containing india rubber or not, not specially provided for in this section, the duty shall be 60 per centum ad valorem.

297. On all blankets and flannels for underwear, composed wholly of wool or of which wool is the component material of chief value, the duty shall be 45 per centum ad valorem.

298. On Aubusson, Axminster, moquette, and chenille carpets, figured or plain, and all carpets or carpeting of like character or description: on Saxony, Wilton, and Tournay

velvet carpets, figured or plain, and all carpets or carpeting of like character or description, and on carpets of every description woven whole for rooms, and Oriental, Berlin, Aubusson, Axminster, and similar rugs, the duty shall be 65 per centum ad valorem.

299. On Brussels carpets, figured or plain, and all carpets or carpeting of like character or description, and on velvet and tapestry velvet carpets, figured or plain, printed on the warp or otherwise, and all carpets or carpeting of like character or description the duty shall be 55 per centum ad valorem.

300. On tapestry Brussels carpets, figured or plain, and all carpets or carpeting of like character or description, printed on the warp or otherwise; on treble ingrain, three-ply, and all chain Venetian carpets; on wool Dutch and two-ply ingrain carpets; on druggets and bockings, printed, colored, or otherwise; and on carpets and carpeting of wool or of which wool is the component material of chief value, not specially provided for in this section, the duty shall be 45 per centum ad valorem.

301. On mats, rugs for floors, screens, covers, hassocks, bedsides, art squares, and other portions of carpets or carpeting made wholly of wool or of which wool is the component material of chief value, and not specially provided for in this section, the rate of duty shall be the same as that herein imposed on carpets or carpeting of like character or description.

302. On manufactures of hair of the camel, goat, alpaca, or other like animal, or of which any of the hair mentioned in paragraph two hundred and ninety-five form the component material of chief value, not specially provided for in this section, the duty shall be 60 per centum ad valorem.

303. On consumption of wools contained in paragraph two hundred and ninety-five, in the manufacture of carpets, druggets and bockings, printed, colored, or otherwise, mats, rugs for floors, screens, covers, hassocks, bedsides, art squares, and portions of carpets or carpeting manufactured or produced in the United States, in whole or in part, from the wools mentioned in said paragraph two hundred and ninety-four, upon which duties have been paid, there shall be allowed to the manufacturer or producer of such articles a drawback equal in amount to the duties paid, less 1 per centum of such duties on the amount of wool contained

therein; such drawback shall be paid under such rules and regulations as the Secretary of the Treasury may prescribe.

304. Whenever in this Act the word "wool" is used in connection with a manufactured article of which it is a component material it shall be held to include wool or hair of the sheep, camel, goat, alpaca, or other like animals, whether manufactured by the woolen, worsted, felt, or any other process.

MR. LA FOLLETTE'S ATTACK ON MANUFACTURERS.

At the close of the debate, on September 8, Senator La Follette, of Wisconsin, offering a wool and woolen substitute schedule of his own, launched into a severe attack on Eastern wool manufacturers. He declared that "the wool-growers were overreached and defrauded by the manufacturers, who were masters of their craft in all its details." The force behind Schedule K, Senator La Follette said, "was the most powerful organization in all the tariff history of this country, the most powerful organization behind any of the schedules." To justify his savage attack upon American woolen manufacturers, Senator La Follette cited the authority of N. I. Stone, one of the employees of the Tariff Board, whose gross misstatements in an article in the "Century Magazine" have lately been corrected, and also S. S. Dale, the editor of the "Textile World Record" of Boston, who enjoys the distinction of being more frequently quoted by the foes of the protective system applied to the woolen industry than any other man now living.

Senator La Follette accepted and employed the familiar anti-protectionist argument that the "prohibitory duties" of the woolen schedule, "not only compelled people of limited means to use goods made of shoddy and other wool substitutes by American manufacturers, but compelled them to pay very dearly for them."

Both Mr. Stone and Mr. Dale had apparently been successful in concealing from the Wisconsin statesman whom they

were prompting the very important specific fact disclosed in the official records of the Government, that the use of shoddy and cotton as substitutes for wool was decreasing and not increasing in the woolen and worsted mills of the United States.

Naturally, acting on the information which had been supplied to him, Senator La Follette entirely abandoned the protectionist principle at the end of the debate upon the bill, and voted with the Democratic Senators for their tariff for revenue only.

The substitute wool and woolen schedule offered August 22 by Senator La Follette was as follows :

THE LA FOLLETTE SUBSTITUTE.

1. All wools, hair of the camel, Angora goat, alpaca, and other like animals shall be divided, for the purpose of fixing the duties to be charged thereon, into the two following classes :

2. Class one, that is to say, merino and all wools containing merino blood, immediate or remote, Down clothing wools, and wools of like character with any of the preceding, including Bagdad wool, China lambs' wool, Castel Branco, Adrianople skin wool, or butcher's wool, and such as have been heretofore usually imported from Buenos Aires, New Zealand, Australia, Cape of Good Hope, Great Britain, Canada, and elsewhere. Leicester, Cotswold, Lincolnshire, Down combing wools, Canadian long wools, or other like combing wools of English blood and usually known by the terms herein used, the hair of the Angora goat, alpaca, and other like animals, and all wools and hairs not hereinafter included in class two.

3. Class two, that is to say, Donskoi, native South American, Cordova, Valparaiso, native Smyrna, and all other native, unimproved wools such as have been heretofore usually imported into the United States from Turkey, Greece, Asia, and elsewhere, excepting improved wools hereinafter provided for ; and the hair of the camel.

4. The standard samples of all wools which are now or may be hereafter deposited in the principal customhouses of the United States, under the authority of the Secretary of

the Treasury, shall be the standards for the classification of wools under this Act, and the Secretary of the Treasury is authorized to renew these standards and to make such additions to them from time to time as may be required, and he shall cause to be deposited like standards in other customhouses of the United States when they shall be needed.

5. Whenever wools of class two shall have been improved by the admixture of merino or English blood, from their present character as represented by the standard samples now or hereafter to be deposited in the principal customhouses of the United States, such improved wools shall be classified for duty as class one.

6. The rate of duty on wools and hairs of class one shall be 15 per centum ad valorem.

7. Wools and hairs of class two shall be free of duty.

8. The rate of duty on wools of class one on the skin shall be $12\frac{1}{2}$ per centum ad valorem, the quantity and value of the wool to be ascertained under such rules as the Secretary of the Treasury may prescribe.

9. On top waste, slubbing waste, roving waste, ring waste, and garnetted waste the rate of duty shall be $12\frac{1}{2}$ per centum ad valorem.

10. On shoddy, wool extract, noils, yarn waste, thread waste, and all other wastes composed wholly of wool or of which wool is the component material of chief value and not specially provided for in this section, the rate of duty shall be 10 per centum ad valorem.

11. On woolen rags, mungo, and flocks, the rate of duty shall be 10 per centum ad valorem.

12. On combed wool or tops and all wools which have been advanced in any manner or by any process of manufacture beyond the washed or scoured condition, not specially provided for in this section, the rate of duty shall be 25 per centum ad valorem.

13. On carded woolen yarns, made wholly of wool or of which wool is the component material of chief value, the rate of duty shall be 30 per centum ad valorem.

14. On worsted yarns, made wholly of wool or of which wool is the component material of chief value, the rate of duty shall be $32\frac{1}{2}$ per centum ad valorem.

15. On cloths, knit fabrics, flannels, felts, women's and children's dress goods, coat linings, Italian cloths, bunting and all other manufactures made wholly of wool or of which wool is the component material of chief value and not otherwise specially provided for in this Act, valued at not more than 60 cents per pound, 40 per centum ad valorem; valued at more than 60 cents per pound and not more than \$1 per pound, 42½ per centum ad valorem; valued at over \$1 per pound, 45 per centum ad valorem.

16. On blankets and on flannels for underwear, composed wholly of wool or of which wool is the component material of chief value, the rate of duty shall be 40 per centum ad valorem: *Provided*, That on flannels composed of wool or of which wool is the component material of chief value, valued at over 50 cents per pound, the rate of duty shall be the same as assessed by this section on women's and children's dress goods.

17. On clothing, ready-made, and articles of wearing apparel of every description, including shawls, whether knitted or woven, and knitted articles of every description made up or manufactured wholly or in part, and not otherwise specially provided for in this Act, the rate of duty shall be 45 per centum ad valorem.

18. On webblings, gorings, suspenders, braces, bandings, beltings, bindings, braids, galloons, edgings, insertings, flouncings, fringes, gimps, cords and tassels, ribbons, ornaments, laces, trinnings, and articles made wholly or in part of lace, embroideries and all articles embroidered by hand or machinery, head nets, nettings, buttons or barrel buttons or buttons of other forms for tassels or ornaments, and manufactures of wool ornamented with beads or spangles of whatever material composed, any of the foregoing made of wool or of which wool is the component material of chief value, whether containing India rubber or not, the rate of duty shall be 40 per centum ad valorem.

19. On hand-made Axminster, Aubusson, Oriental and similar rugs and carpets, made wholly of wool or of which wool is the component material of chief value, the rate of duty shall be 50 per centum ad valorem; on all other carpets and rugs made wholly of wool or of which wool is the component material of chief value, and not otherwise specially provided for in this Act, including machine-made Axminster,

moquette, chenille, Wilton, Brussels, tapestry, and ingrain carpets and rugs, 30 per centum ad valorem.

20. Carpets and carpeting of wool, flax, or cotton, or composed in part of any of them, not otherwise specially provided for in this Act, and on mats, matting, and rugs of cotton, 30 per centum ad valorem.

21. Mats, rugs for floors, screens, covers, hassocks, bed-sides, art squares, and other portions of carpets or carpeting made wholly of wool or of which wool is the component material of chief value, and not specially provided for in this section, shall be subjected to the rate of duty herein imposed on carpets or carpeting of like character or description.

22. Whenever, in any paragraphs of this schedule, the word "wool" is used in connection with a manufactured article of which it is a component material it shall be held to include wool or hair of the sheep, camel, goat, alpaca, or other animal, whether manufactured by a woolen, worsted, felt, or any other process.

23. Paragraphs one to eleven of this schedule shall be effective on and after the first day of January, nineteen hundred and fourteen, and paragraphs twelve to twenty-two inclusive shall be effective on and after the first day of April, nineteen hundred and fourteen.

SENATOR PENROSE IN DEFENCE.

The principal speech on the protectionist side in defence of the American wool manufacture was made by Senator Penrose, of Pennsylvania, the former chairman of the Committee on Finance. Senator Penrose said, in introducing his own substitute for the wool and woolen schedule of the Democratic measure, that it was presented to give a distinct advantage to American manufacturers in competition for American business, as against the Democratic woolen schedule which gave a very marked preference to European manufacturers. Senator Penrose upheld the superior efficiency of specific duties, wherever they could be applied. His own bill made real and substantial reductions in the woolen schedule from the rates of the existing law.

Senator Penrose pointed out the fact that under the protective system the use of shoddy was decreasing in the United States while under tariff for revenue only it was increasing in Great Britain. He summarized the experience of American and of British woolen mills under the Gorman-Wilson tariff, which brought severe depression to this country and gave British manufacturers the highest prosperity they had ever known. He pointed out the fact that the proposed Democratic woolen schedule was much more favorable to foreign producers because of its very much lower rates than the previous tariff of 1894.

In summarizing his argument Senator Penrose said :

The pending Democratic tariff measure goes far beyond the Gorman-Wilson law in the lavish subsidies which it bestows upon the manufacturers of Great Britain and the Continent. Here is a comparison of the rates of the pending bill and of the Gorman-Wilson tariff on the principal products covered by the woolen schedule — and the woolen schedule is fairly typical of all :

	Present Democratic Tariff Bill.	Gorman-Wilson Law.
	<i>Per cent.</i>	<i>Per cent.</i>
Tops	5	20
Yarns	15	30 to 40
Cloths and dress goods	35	40 to 50 ¹

¹ Most of the imports under the Gorman-Wilson law actually paid the rate of 50 per cent.

Since the Gorman-Wilson era wages in American woolen mills have advanced on the average about 30 or 40 per cent. There has been no corresponding increase in the wages paid to the employees in the woolen mills of Great Britain; indeed, there has scarcely been any appreciable increase in British wages at all. Is it surprising that British manufacturers are urging their public men and newspapers to avoid any congratulatory comment on the pending tariff-revision measure until it has finally passed both Houses of Congress and received the signature of the President? From the British standpoint this bill is almost too good to be believed.

It actually carries many rates of duty much lower and

more favorable to British interests than the New York importers representing these foreign manufacturers dared to ask for in their arguments and briefs presented to the Committee on Ways and Means and to the Committee on Finance. This bill of the Democratic majority is distinctively a bill against America and for Europe.

The Penrose substitute for the Democratic wool and woolen schedule was as follows :

THE PENROSE SUBSTITUTE.

SCHEDULE K. — WOOL AND MANUFACTURES OF.

1. All wools, hair of the camel, goat, alpaca, and other like animals shall be divided, for the purpose of fixing the duties to be charged thereon, into the three following classes :

2. Class one ; that is to say, merino, mestiza, metz, or metis wools, or other wools of merino blood, immediate or remote, Down clothing wools, and wools of like character with any of the preceding, including Bagdad wool, China lamb's wool, Castel Branco, Adrianople skin wool or butchers' wool, and such as have been heretofore usually imported into the United States from Buenos Aires, New Zealand, Australia, Cape of Good Hope, Russia, Great Britain, Canada, Egypt, Morocco, and elsewhere, and Leicester, Cotswold, Lincolnshire, Down combing wools, Canada long wools, or other like combing wools of English blood, and usually known by the terms herein used, and also hair of the camel and all wools not hereinafter included in classes two and three.

3. Class two ; that is to say, the hair of the Angora goat, alpaca, and other like animals.

4. Class three : that is to say, Donskoi, native South American, Cordova, Valparaiso, native Smyrna, Russian camel's hair, and all such wools of like character as have been heretofore usually imported into the United States from Turkey, Greece, Syria, and elsewhere, excepting improved wools hereinafter provided for.

5. The standard samples of all wools or hair which are now or may be hereafter deposited in the principal custom-houses of the United States under the authority of the Secretary of the Treasury shall be the standards for the classification of wools and hair under this Act, and the Secretary

of the Treasury is authorized to renew these standards and to make such additions to them from time to time as may be required, and he shall cause to be deposited like standards in other customhouses of the United States when they may be needed.

6. Whenever wools of class three shall have been improved by the admixture of merino or English blood from their present character, as represented by the standard samples now or hereafter to be deposited in the principal customhouses of the United States, such improved wools shall be classified for duty as class one.

7. If any bale or package of wool or hair specified in this Act invoiced or entered as of any specified class, or claimed by the importer to be dutiable as of any specified class, shall contain any wool or hair subject to a higher rate of duty than the class so specified, the whole bale or package shall be subject to the highest rate of duty chargeable on wool or hair of the class subject to such higher rate of duty, and if any bale or package be claimed by the importer to be shoddy, mungo, flocks, wool, hair, or other material of any class specified in this Act, and such bale contain any admixture of any one or more of said materials, or of any other material, the whole bale or package shall be subject to duty at the highest rate imposed upon any article in said bale or package.

8. The duty on all wool and hair of class one and class two shall be laid on the basis of the clean content. If imported in washed or unwashed condition, the duty shall be 18 cents per pound on the clean content; if imported scoured, the duty shall be 20 cents per pound on the clean content. The clean content shall be determined by scouring and conditioning tests, which shall be made according to regulations which the Secretary of the Treasury shall prescribe.

9. The duty on all wools and hair of class three, imported in their natural condition, shall be 7 cents per pound; if scoured, 19 cents per pound: *Provided*, That on consumption of wools and hair of class three, in the manufacture of carpets, druggets and bockings, mats, rugs for floors, screens, covers, hassocks, bedsides, art squares, and portions of carpets or carpeting hereafter manufactured or produced in the United States in whole or in part from wools or hair of class three, upon which duties have been paid, there shall be allowed to the manufacturer or producer of such articles a drawback equal in amount to the duties paid

less 1 per centum of such duties on the amount of the wools or hair of class three contained therein; such drawback shall be paid under such rules and regulations as the Secretary of the Treasury may prescribe.

10. The duty on wools on the skin shall be 2 cents less per pound than is imposed upon the clean content as provided for wools of class one, and 1 cent less per pound than is imposed upon wools of class two imported in their natural condition, the quantity to be ascertained under such rules as the Secretary of the Treasury shall prescribe.

11. Unwashed wools shall be considered such as shall have been shorn from the sheep without any cleansing; that is, in their natural condition. Washed wools shall be considered such as have been washed with water only on the sheep's back or on the skin. Wools washed in any other manner than on the sheep's back or on the skin shall be considered as scoured wool.

12. Top waste, slubbing waste, and roving waste, 28 cents per pound.

13. Ring waste, garnetted waste, and all other wastes composed wholly or in part of wool, and not specially provided for in this section, 20 cents per pound.

14. Noils, carbonized, 15 cents per pound; not carbonized, 12 cents per pound.

15. Thread waste, yarn waste, wool waste, 16 cents per pound.

16. Shoddy and wool extract, 16 cents per pound.

17. Woolen rags, flocks, and mungo, 5 cents per pound.

18. Combed wool or tops, made wholly or in part of wool or hair, 29 cents per pound.

19. The word "number" appearing in this paragraph, whether applied to woolen or worsted yarns, shall be the number of hanks per pound, a hank being a measure of five hundred and sixty yards of single yarn or roving.

On tops advanced by process of manufacture to any number of sliver or roving or single yarn up to single twelves the duty shall be 36 cents per pound.

On all numbers exceeding single twelves and up to and including single forties the duty shall be 36 cents per pound

plus two-tenths of a cent per number per pound on all numbers in excess of single twelves.

On all numbers exceeding single forties and up to and including single sixties the duty shall be 42 cents per pound plus four-tenths of a cent per number per pound on all numbers in excess of single forties.

On all numbers exceeding single sixties the duty shall be 50 cents per pound plus six-tenths of a cent per number per pound on all numbers in excess of single sixties.

On all rovings and yarns advanced beyond the condition of singles by grouping or twisting two or more rovings or yarns together up to and including number twelves the duty shall be 2 cents per pound in addition to the foregoing duties on single yarns.

On all numbers exceeding twelves and up to and including forties the duty shall be 2 cents per pound plus one-tenth of a cent per number per pound on all numbers in excess of number twelves in addition to the duties on single yarns of corresponding numbers.

On all numbers exceeding forties up to and including sixties the duty shall be 5 cents per pound plus two-tenths of a cent per number per pound on all numbers in excess of number forties in addition to the duties on single yarns of corresponding numbers.

On all numbers exceeding sixties the duty shall be 9 cents per pound plus three-tenths of a cent per number per pound on all numbers in excess of number sixties in addition to the duties on single yarns of corresponding numbers.

Woolen yarns, in singles, or two or more yarns twisted together, shall be subject to a reduction of 7 cents per pound from the duties imposed by this paragraph on corresponding numbers of single or twisted worsted yarns.

On all of the above when bleached, dyed, colored, stained, or printed the duty shall be 5 cents per pound in addition to the other duties prescribed in this paragraph, and if singed or gassed there shall be a further addition of 3 cents per pound.

20. On cloths, knit fabrics, flannels, felts, and all manufactures of every description made wholly or in part of wool, not specially provided for in this section, valued at not more than 20 cents per pound, the duty shall be 12 cents per pound and in addition thereto 25 per centum ad valorem;

Valued at more than 20 cents and not more than 30 cents per pound, 16 cents per pound and in addition thereto 35 per centum ad valorem;

Valued at more than 30 cents and not more than 40 cents per pound, 20 cents per pound and in addition thereto 35 per centum ad valorem ;

Valued at more than 40 cents and not more than 50 cents per pound, 26 cents per pound and in addition thereto 45 per centum ad valorem ;

Valued at more than 50 cents and not more than 60 cents per pound, 30 cents per pound and in addition thereto 50 per centum ad valorem ;

Valued at more than 60 cents and not more than 80 cents per pound, 32 cents per pound and in addition thereto 50 per centum ad valorem ;

Valued at more than 80 cents per pound, 35 cents per pound, and in addition thereto 55 per centum ad valorem.

21. On blankets composed wholly or in part of wool valued at not more than 30 cents per pound the duty shall be 16 cents per pound and in addition thereto 25 per centum ad valorem ;

Valued at more than 30 cents and not more than 40 cents per pound, 18 cents per pound and in addition thereto 30 per centum ad valorem ;

Valued at more than 40 cents and not more than 50 cents per pound, 22 cents per pound and in addition thereto 30 per centum ad valorem ;

Valued at more than 50 cents per pound, 26 cents per pound and in addition thereto 35 per centum ad valorem : *Provided*, That on blankets over three yards in length the same duties shall be paid as on cloths.

22. On women's and children's dress goods, coat linings, Italian cloths, and goods of similar description and character, of which the warp consists wholly of cotton or other vegetable material, with the remainder of the fabric composed wholly or in part of wool, the duty shall be 7 cents per square yard; on women's and children's dress goods, coat linings, Italian cloths, hunting, and goods of similar description or character composed wholly or in part of wool and not specially provided for in this section, the duty shall be 11 cents per square yard, and in addition thereto on all the foregoing valued at not more than 70 cents per pound, 50 per centum ad valorem ; valued at above 70 cents per pound, 55 per centum ad valorem : *Provided*, That on all the foregoing weighing over four ounces per square yard the duty shall be the same as imposed by this schedule on cloths.

23. On clothing and articles of wearing apparel, knitted or woven, of every description, made up or manufactured wholly or in part, and composed wholly or in part of wool, the rate of duty shall be as follows:

If valued at not more than 60 cents per pound, the duty shall be 16 cents per pound and in addition thereto 35 per centum ad valorem.

If valued at more than 60 cents per pound and not more than \$1 per pound, 20 cents per pound and in addition thereto 40 per centum ad valorem.

If valued at more than \$1 per pound and not more than \$1.50 per pound, 26 cents per pound and 50 per centum ad valorem.

If valued at more than \$1.50 per pound and not more than \$2 per pound, 30 cents per pound and 55 per centum ad valorem.

If valued at more than \$2 per pound and not more than \$2.50 per pound, 32 cents per pound and 55 per centum ad valorem.

If valued at more than \$2.50 per pound, 35 cents per pound and 60 per centum ad valorem.

24. On all manufactures of every description made wholly or in part of wool, not specially provided for in this section, the duty shall be 35 cents per pound and in addition thereto 50 per centum ad valorem.

25. On knitted wearing apparel of every description and all knitted articles and manufactures thereof valued at 80 cents per pound or more, composed wholly or in chief value of wool, 24 cents per pound and in addition thereto 45 per centum ad valorem; if valued at less than 80 cents per pound, 24 cents per pound and in addition thereto 35 per centum ad valorem; on all the foregoing composed in part of wool, but in chief value of any other material, 60 per centum ad valorem.

26. On handmade Aubusson, Axminster, oriental, and similar carpets and rugs, made wholly or in part of wool, the rate of duty shall be 50 per centum ad valorem; on all other carpets of every description, druggets, bookings, mats, rugs for floors, screens, covers, hassocks, bedsides, art squares, and portions of carpets or carpeting, made wholly or in part of wool, the duty shall be 40 per centum ad valorem.

27. Whenever, in any schedule of this Act, the word "wool" is used in connection with a manufactured article of which it is a component material, it shall be held to include

wool or hair of the sheep, camel, goat, alpaca, or other like animal, whether manufactured by the woolen, worsted, felt, or any other process.

28. The foregoing paragraphs, providing the rates of duty herein for manufactures of wool, shall take effect on the first day of January, nineteen hundred and fourteen.

All of the proposed substitute woolen schedules, offered by Senators Penrose, La Follette, Smoot, and Catron, were, of course, rejected by the Senate. It was on September 9 that the tariff bill emerged from the gauntlet of long debate and was passed by the Senate on a division of 44 to 37, two nominal Republicans, Senators La Follette, of Wisconsin, and Poindexter, of Washington, voting for the bill and two Democrats, Senators Thornton and Ransdell, of Louisiana, voting against it. Some changes were made in the wool and woolen schedule, at the instance of the Committee on Finance during the discussion of the measure by the Senate. The text of the schedule as passed by the Senate was as follows:

THE SCHEDULE AS PASSED BY THE SENATE.

SCHEDULE K. — THE WOOLEN SCHEDULE.

All words stricken out of the House bill are enclosed in brackets, and the new provisions made by the Senate Finance Committee are printed in italics.

SCHEDULE K—WOOL AND MANUFACTURES OF.

295. — Combed wool or tops and roving or roping made wholly or in part of wool or camel's hair, and on other wool and hair which have been advanced in any manner or by any process of manufacture beyond the washed or scoured condition, not specially provided for in this section, [15] 5 per centum ad valorem.

296. — Yarns made wholly or in chief value of wool, [20] 15 per centum ad valorem.

297. — Cloths, knit fabrics, felts not woven, and all manufactures of every description made, by any process, wholly or in chief value of wool, not specially provided for in this sec-

tion, 35 per centum ad valorem; *cloths if made in chief value of cattle hair or horse hair, not specially provided for in this section, 25 per centum ad valorem; stockings, hose and half hose, made on knitting machines or frames, composed wholly or in chief value of wool, not specially provided for in this section, 20 per centum ad valorem; stockings, hose and half hose, selvedged, fashioned, narrowed, or shaped wholly or in part by knitting machines or frames, or knit by hand, including such as are commercially known as seamless stockings, hose and half hose, and clocked stockings, hose and half hose, gloves and mittens, all of the above, composed wholly or in chief value of wool, if valued at not more than \$1.20 per dozen pairs, 30 per centum ad valorem; if valued at more than \$1.20 per dozen pairs, 40 per centum ad valorem; press cloth composed of camel's hair, 10 per centum ad valorem.*

298. — Blankets, *not specially provided for in this section*, and flannels, composed wholly or in chief value of wool, 25 per centum ad valorem [; flannels composed wholly or in chief value of wool, valued at above 50 cents per pound, 35 per centum ad valorem].

299. — Women's and children's dress goods, coat linings, Italian cloths, bunting, and goods of similar description and character, composed wholly or in chief value of wool, and not specially provided for in this section, 35 per centum ad valorem.

300. — Clothing, ready made, and articles of wearing apparel of every description, including shawls whether knitted or woven, and knitted articles of every description made up or manufactured wholly or in part, and not specially provided for in this section, composed wholly or in chief value of wool, *or of wool and india rubber*, 35 per centum ad valorem.

301. — Webbing, suspenders, braces, bandings, *belts*, belt-ings, bindings, cords, cords and tassels, and ribbons; any of the foregoing made of wool or of which wool or wool and india rubber are the component materials of chief value, *and not specially provided for in this section*, 35 per centum ad valorem.

302. — Aubusson, Axminster, moquette, and chenille carpets, figured or plain, and all carpets or carpeting of like character or description, *not specially provided for in this section*, 35 per centum ad valorem.

303. — Saxony, Wilton, and Tournay velvet carpets, figured or plain, and all carpets or carpeting of like character or description, 30 per centum ad valorem.

304. — Brussels carpets, figured or plain, and all carpets or carpeting of like character or description, 25 per centum ad valorem.

305. — Velvet and tapestry velvet carpets, figured or plain, printed on the warp or otherwise, and all carpets or carpeting of like character or description, 30 per centum ad valorem.

306. — Tapestry Brussels carpets, figured or plain, and all carpets or carpeting of like character or description, printed on the warp or otherwise, 20 per centum ad valorem.

307. — Treble ingrain, three-ply, and all-chain Venetian carpets, 20 per centum ad valorem.

308. — Wool Dutch and two-ply ingrain carpets, 20 per centum ad valorem.

[**309.** — Carpets of every description, woven whole for rooms, and Oriental, Berlin, Aubusson, Axminster, and similar rugs, 50 per centum ad valorem.]

309. — *Oriental, Berlin, Aubusson, Axminster, and similar rugs, and carpets of every description woven whole for rooms, the value of which exceeds 30 cents per square foot, 50 per centum ad valorem; when valued at 30 cents per square foot and under, the same duty shall be assessed as that which applies to the same or similar grades of carpets, plus 5 per centum ad valorem.*

310. — Druggets and bockings, printed, colored, or otherwise, 20 per centum ad valorem.

311. — Carpets and carpeting of wool, [flax,] or cotton, or composed in part of [any] *either* of them, not specially provided for in this section, and on mats, matting, and rugs of cotton, 20 per centum ad valorem.

312. — Mats, rugs for floors, screens, covers, hassocks, bed-sides, art squares, and other portions of carpets or carpeting, [made] *composed* wholly or in [part] *chief value* of wool, and not specially provided for in this section, shall be subjected to the rate of duty herein imposed on carpets or carpeting of like character or description.

313. — Whenever in this section the word “ wool ” is used in connection with a manufactured article of which it is a component material, it shall be held to include wool or hair of the sheep, camel, or other like animals, whether manufactured by the woolen, worsted, felt, or any other process.

[**314.** — Hair of the Angora goat, alpaca, and other like animals, and all hair on the skin of such animals, 20 per centum ad valorem.]

315. — Tops made from the hair of the Angora goat, alpaca, and other like animals, [25] 5 per centum ad valorem.

316. — Yarns made of the hair of the Angora goat, alpaca, and other like animals, [30] 15 per centum ad valorem.

317. — Cloth and all manufactures of every description made *by any process, wholly or in chief value*, of the hair of the Angora goat, alpaca, and other like animals, not specially provided for in this section, [40] 35 per centum ad valorem.

318. — Plushes, velvets, and all other pile fabrics, cut or uncut, woven or knit, whether or not the pile covers the entire surface, *and woven-figured upholstery goods*, made wholly or [partly] *in chief value of wool or of the hair of the Angora goat, alpaca, [and] or other like animals*, and articles made wholly or in chief value of such plushes [or] velvets, *or other fabrics* [50] 40 per centum ad valorem.

318½. — *The provisions of this schedule (K) shall be effective on and after the first day of January, nineteen hundred and fourteen, until which date the rates of duty now provided by Schedule K of the existing law shall remain in full force and effect.*

FREE LIST.

427½. — *Blankets, composed wholly or in chief value of wool or cotton, valued at less than 40 cents per pound.*

652. — *Wool of the sheep, hair of the camel, Angora goat, alpaca, and other like animals, not specially provided for in this section, and all wools and hair on the skin of such animals, and paper twine for binding any of the foregoing. This paragraph shall be effective on and after the first day of December, nineteen hundred and thirteen, until which time the rates of duty now provided by Schedule K of the existing law shall remain in full force and effect.*

653. — Wool wastes : All noils, top waste, card waste, slubbing waste, roving waste, ring waste, yarn waste, bur waste, thread waste, garnetted waste, shoddies, mungo, flocks, wool extract, carbonized wool, carbonized noils, and all other wastes not specially provided for in this section. *This paragraph shall be effective on and after the first day of December, nineteen hundred and thirteen, until which time the rates of duty now provided by Schedule K of the existing law shall remain in full force and effect.*

SILK WASTE AND NOILS.

The bill as reported to the Senate from the Committee of the Whole contained the following provision :

319. — Silk partially manufactured from cocoons or from waste silk and not further advanced or manufactured than carded or combed silk, and silk noils exceeding two inches in length, [15 per centum ad valorem] 30 cents per pound.

And in the free list, Paragraph 603, "Silk cocoons and silk waste."

The effect of these provisions is that silk noils not exceeding two inches in length will, under the new law, be free of duty as at present.

WORK OF THE CONFERENCE COMMITTEE.

On September 11 a committee of conference was ordered in the House on the tariff bill, and Chairman Underwood, of Alabama, Mr. Kitchin, of North Carolina, Mr. Rainey, of Illinois, and Mr. Dixon, of Indiana, Democrats, ex-Chairman Payne, of New York, and Mr. Fordney, of Michigan, Republicans, and Mr. Murdock, of Kansas, Progressive, were appointed conferees. In the Senate the conferees were Chairman Simmons, of North Carolina, Senator Williams, of Mississippi, Senator Johnson, of Maine, and Senator Shively, of Indiana, Democrats, and ex-Chairman Penrose, of Pennsylvania, Senator Lodge, of Massachusetts, and Senator La Follette, of Wisconsin, Republicans.

The majority members of this Conference Committee immediately began their important work. But their report

was not ready until September 29, when Chairman Underwood laid the matter before the House. Mr. Underwood in the report spoke of Schedule K as follows:

SCHEDULE K — WOOL AND MANUFACTURES THEREOF.

Reductions have been made from the House rates on tops and yarns made of wool or hair of Angora goats and like animals; on flannels valued at above 50 cents per pound, and on plush, velvets, and other pile fabrics.

The Senate receded from its amendment placing cotton and wool blankets on the free list and reducing the rates on Oriental and similar rugs.

A new classification has been made for woolen stockings, hose and half hose, and gloves and mittens, and a rate of 30 per cent placed on those valued at less than \$1.20 per dozen, a reduction from the House rate. A rate of 40 per cent is provided on all stockings and half hose of wool valued at more than \$1.20 per dozen, an increase over the House rate of 35 per cent.

Camel's hair press cloth is specifically provided for at 10 per cent ad valorem, a reduction from the House rate on such as was not imported for oil milling purposes.

Schedule K does not become effective until January 1, 1914. Wool becomes free on December 1, 1913.

On September 30, after a very brief debate, the House agreed to the conference report by a vote of 254 to 103, four Democrats, Representatives Donohoe, of the textile district in Philadelphia, and Lazaro, Morgan, and Broussard, of Louisiana, voting against the bill, and four Republicans, Representatives Manahan, of Minnesota, Stafford and Cary, of Wisconsin, and Kent, of California, and three Progressives, Representatives Kelly and Rupley, of Pennsylvania, and MacDonald of Michigan, voting for it. Chairman Underwood expressed the opinion that the new tariff would by its record of achievement put an end to the protective tariff system in the United States.

On October 2 the conference report on the tariff bill was adopted by the Senate by a vote of 36 to 17, only four more than the necessary quorum of the Senate. Senator La Follette, of Wisconsin, and Senator Poindexter, of Washington,

nominal Republicans, voted for the conference report as they had voted for the bill on its passage. Two Democratic Senators, Ransdell and Thornton, of Louisiana, voted against the report as they had voted against the bill.

The tariff bill as passed by both houses was sent to the President and signed by him on the following day, Friday, October 3, 1913. The Simmons-Underwood tariff, as it thus finally became a law at midnight of this day, was as follows :

THE NEW TARIFF AS ENACTED.

THE SIMMONS-UNDERWOOD TARIFF LAW.

SCHEDULE K—WOOL AND MANUFACTURES OF—AS PASSED
BY BOTH HOUSES OF CONGRESS AND SIGNED BY
PRESIDENT WILSON OCTOBER 3, 1913.

286.—Combed wool or tops and roving or roping made wholly or in part of wool or camel's hair, and on other wool and hair which have been advanced in any manner or by any process of manufacture beyond the washed or scoured condition, not specially provided for in this section, 8 per centum ad valorem.

287.—Yarns made wholly or in chief value of wool, 18 per centum ad valorem.

288.—Cloths, knit fabrics, felts not woven, and all manufactures of every description made, by any process, wholly or in chief value of wool, not specially provided for in this section, 35 per centum ad valorem; cloths if made in chief value of cattle hair or horse hair, not specially provided for in this section, 25 per centum ad valorem; plushes, velvets, and all other pile fabrics, cut or uncut, woven or knit, whether or not the pile covers the entire surface, made wholly or in chief value of wool, and articles made wholly or in chief value of such plushes, velvets, or pile fabrics, 40 per centum ad valorem; stockings, hose and half hose, made on knitting machines or frames, composed wholly or in chief value of wool, not specially provided for in this section, 20 per centum ad valorem; stockings, hose and half hose, selvedged, fashioned, narrowed, or shaped wholly or in part by knitting machines or frames, or knit by hand, including such as are commercially known as seamless stockings, hose and half hose, and clocked stockings, hose and half hose,

gloves and mittens, all of the above, composed wholly or in chief value of wool, if valued at not more than \$1.20 per dozen pairs, 30 per centum ad valorem; if valued at more than \$1.20 per dozen pairs, 40 per centum ad valorem; press cloth composed of camel's hair, not specially provided for in this section, 10 per centum ad valorem.

289. — Blankets and flannels, composed wholly or in chief value of wool, 25 per centum ad valorem; flannels composed wholly or in chief value of wool, valued at above 50 cents per pound, 30 per centum ad valorem.

290. — Women's and children's dress goods, coat linings, Italian cloths, bunting, and goods of similar description and character, composed wholly or in chief value of wool, and not specially provided for in this section, 35 per centum ad valorem.

291. — Clothing, ready-made, and articles of wearing apparel of every description, including shawls whether knitted or woven, and knitted articles of every description made up or manufactured wholly or in part, and not specially provided for in this section, composed wholly or in chief value of wool, 35 per centum ad valorem.

292. — Webbing, suspenders, braces, bandings, belts, beltings, bindings, cords, cords and tassels, and ribbons; any of the foregoing made of wool or of which wool or wool and india rubber are the component materials of chief value, and not specially provided for in this section, 35 per centum ad valorem.

293. — Aubusson, Axminster, moquette, and chenille carpets, figured or plain, and all carpets or carpeting of like character or description, 35 per centum ad valorem.

294. — Saxony, Wilton, and Tournay velvet carpets, figured or plain, and all carpets or carpeting of like character or description, 30 per centum ad valorem.

295. — Brussels carpets, figured or plain, and all carpets or carpeting of like character or description, 25 per centum ad valorem.

296. — Velvet and tapestry velvet carpets, figured or plain, printed on the warp or otherwise, and all carpets or carpeting of like character or description, 30 per centum ad valorem.

297. — Tapestry Brussels carpets, figured or plain, and all carpets or carpeting of like character or description, printed on the warp or otherwise, 20 per centum ad valorem.

298. — Treble ingrain, three-ply, and all-chain Venetian carpets, 20 per centum ad valorem.

299. — Wool Dutch and two-ply ingrain carpets, 20 per centum ad valorem.

300. — Carpets of every description, woven whole for rooms, and Oriental, Berlin, Aubusson, Axminster, and similar rugs, 50 per centum ad valorem.

301. — Druggets and bookings, printed, colored, or otherwise, 20 per centum ad valorem.

302. — Carpets and carpeting of wool or cotton, or composed in part of either of them, not specially provided for in this section, and on mats, matting, and rugs of cotton, 20 per centum ad valorem.

303. — Mats, rugs for floors, screens, covers, hassocks, bed-sides, art squares, and other portions of carpets or carpeting, composed wholly or in part of wool, and not specially provided for in this section, shall be subjected to the rate of duty herein imposed on carpets or carpeting of like character or description.

304. — Whenever in this section the word “wool” is used in connection with a manufactured article of which it is a component material, it shall be held to include wool or hair of the sheep, camel, or other like animals, whether manufactured by the woolen, worsted, felt, or any other process.

305. — Hair of the Angora goat, alpaca, and other like animals, and all hair on the skin of such animals, 15 per centum ad valorem.

306. — Tops made from the hair of the Angora goat, alpaca, and other like animals, 20 per centum ad valorem.

307. — Yarns made of the hair of the Angora goat, alpaca, and other like animals, 25 per centum ad valorem.

308. — Cloth and all manufactures of every description made by any process, wholly or in chief value of the hair of the Angora goat, alpaca, and other like animals, not specially provided for in this section, 40 per centum ad valorem.

309. — Plushes, velvets, and all other pile fabrics, cut or uncut, woven or knit, whether or not the pile covers the entire surface, made wholly or partly of the hair of the Angora goat, alpaca, or other like animals, and articles made wholly or in chief value of such plushes, velvets, or pile fabrics, 45 per centum ad valorem.

310. — The provisions of this schedule (K) shall be effective on and after the first day of January, nineteen hundred and fourteen, until which date the rates of duty now provided by Schedule K of the existing law shall remain in full force and effect.

From Schedule I — Cotton Manufactures :

266. — All articles made from cotton cloth, whether finished or unfinished, and all manufactures of cotton or of which cotton is the component material of chief value, not specially provided for in this section, 30 per centum ad valorem.

From Schedule L — Silks and Silk Goods :

311. — Silk partially manufactured from cocoons or from waste silk and not further advanced or manufactured than carded or combed silk, and silk noils, exceeding two inches in length, 20 cents per pound.

FREE LIST.

599. — Silk cocoons and silk waste.

650. — Wool of the sheep, hair of the camel, and other like animals, and all wools and hair on the skin of such animals, and paper twine for binding any of the foregoing. This paragraph shall be effective on and after the first day of December, nineteen hundred and thirteen, until which time the rates of duty now provided by Schedule K of the existing law shall remain in full force and effect.

651. — Wool wastes: All noils, top waste, card waste, slubbing waste, roving waste, ring waste, yarn waste, bur waste, thread waste, garnetted waste, shoddies, mungo, flocks, wool

extract, carbonized wool, carbonized noils, and all other wastes not specially provided for in this section. This paragraph shall be effective on and after the first day of December, nineteen hundred and thirteen, until which time the rates of duty now provided by Schedule K of the existing law shall remain in full force and effect.

Paragraph 386 provides that where two or more rates of duty may be applicable, the highest rate shall be levied, and also explains the meaning of the words "component material of chief value." The paragraph follows:

386. — That each and every imported article, not enumerated in this section, which is similar, either in material, quality, texture, or the use to which it may be applied, to any article enumerated in this section as chargeable with duty, shall pay the same rate of duty which is levied on the enumerated article which it most resembles in any of the particulars before mentioned; and if any nonenumerated article equally resembles two or more enumerated articles on which different rates of duty are chargeable, there shall be levied on such nonenumerated article the same rate of duty as is chargeable on the article which it resembles paying the highest rate of duty; and on articles not enumerated, manufactured of two or more materials, the duty shall be assessed at the highest rate at which the same would be chargeable if composed wholly of the component material thereof of chief value; and the words "component material of chief value," wherever used in this section, shall be held to mean that component material which shall exceed in value any other single component material of the article; and the value of each component material shall be determined by the ascertained value of such material in its condition as found in the article. If two or more rates of duty shall be applicable to any imported article, it shall pay duty at the highest of such rates.

Never has a tariff measure had longer consideration by its friends and authors. Chairman Underwood and his immediate colleagues studied out very carefully the details of their plan before it was presented in the House of Representatives, and nearly five months elapsed from the time when

the new tariff bill reached the Senate before its final acceptance by that body. All possible information was frankly offered by representatives of the great American national industries. If it was not fully availed of, that was not the fault of the business men themselves. The new tariff embodies as complete an abandonment of protectionism and as thorough an acceptance of the old Southern Democratic idea of tariff for revenue only as the leaders of the National Administration have dared to give the country. The economic experiment on which the country is now entering involves the century-old issue between free trade and protection. If the new tariff fails, as the business interests of the country almost unanimously believe it will fail, to justify the economic theory upon which it is based, it will mean the utter repudiation of free trade and the final adoption of the protective principle as emphatically as the gold standard has been adopted by the American people and their government.

WINTHROP L. MARVIN.

JAMES MOORE SWANK: PROTECTIONIST.

By JOHN BRUCE MCPHERSON.

I.

ON the last day of the year 1912 James Moore Swank, for forty years the executive head of the American Iron and Steel Association, voluntarily retired from that position. On the same date the organization itself, formed as the American Iron Association in 1855 (the year in which Bessemer was granted his first patent for his great invention) and reorganized as the American Iron and Steel Association in 1864 (the year in which Bessemer steel was first made in this country), ceased its activities as the representative of the iron and steel industries of the United States, giving place to the American Iron and Steel Institute, incorporated a few years ago under the laws of New York.

In view of this long stewardship of the distinguished secretary, who was vice-president and general manager after 1885, and of the policies which have been advocated and supported by, and the friendly relations which have always existed between, the American Iron and Steel Association and the National Association of Wool Manufacturers, it is altogether fitting, and a most apposite time when all the free traders of the country and those favoring a tariff euphoniously termed "competitive" are about ¹ to write upon our statute books a law embodying their theories, to review the life work of this American economist and veteran of many tariff contests.

Born in Westmoreland County, Pennsylvania, July 12, 1832, he has in his veins, on his mother's side, the blood of the Scotch-Irish Presbyterians who emigrated from the North of Ireland to Pennsylvania early in the eighteenth century, and on his father's side the blood of German Lutherans who

¹ This was written in June, 1913.



James H. Swank

settled in the same province soon after the granting of Penn's charter. For five generations his ancestors on both sides were Pennsylvanians. His maternal great-grandfather, John Moore, was a delegate from Westmoreland County to the convention which met in Philadelphia on July 15, 1776, to form a constitution and frame a government for Pennsylvania, to which convention the people had been invoked "to choose only such persons to act for them as were distinguished for wisdom, integrity, and a firm attachment to the liberties" of that province. He was chosen by this convention a member of the Council of Safety, which was to exercise the executive powers of government so far as they related to the military defense and safety of the province, and also a member of the committee to draft a bill of rights and a constitution for the proposed new Commonwealth of Pennsylvania. In 1779 he was commissioned one of the judges of the Westmoreland County courts, and appointed president judge in 1785. After his retirement from the bench he was elected to represent his district for two terms in the State Senate. From this ancestor, who was in personal appearance "a man full six feet high, very straight and erect, with large brown eyes and rather aquiline nose," Mr. Swank clearly inherited his personal characteristics, his literary tastes, and his interest in public affairs.

In 1838, when the subject of this sketch was but six years old, his father moved with his family to Johnstown, where he attended what were known as "subscription" schools until he had completed his fourteenth year, when his parents decided to give him an academic education, which object was pursued during the next few years as opportunity permitted, ending in 1850 with the freshman year in Jefferson College at Canonsburg, Penn. For the next few years he taught a country school and clerked in his father's store, in which time he began to read law with Judge James Potts, but after finishing three books of Blackstone's Commentaries he abandoned his legal studies for journalistic work. During the Presidential campaign of 1852, an unsuccessful one and the last waged by the Whig party, he edited a Whig cam-

paign newspaper published in his home town. In the following year, at the age of twenty-one, he became editor of a Whig weekly paper, which had that year suspended publication, after an uncertain and unsuccessful career. Borrowing \$150 with which to purchase new type for the paper Mr. Swank, changing the name from the "Cambria Gazette" to the "Cambria Tribune," changed later to the "Johnstown Tribune," started on the difficult task of making the paper an indispensable medium to the people of his county. It is a coincidence of interest that the work of constructing the Cambria Iron Works at Johnstown was begun this same year.

The task of building up a successful and paying paper was an arduous one, but he had the satisfaction of seeing this small venture of his early manhood develop so well that at the present time it is a widely circulated and influential daily newspaper of Western Pennsylvania. Between 1856 and

864 — during which interval he served in 1861 as county superintendent of public schools — several changes in the management of the paper occurred, but in the latter year the sole ownership reverted to his hands, where it continued until he sold it to his brother in December, 1869, when he went to Washington to become the Clerk of the House Committee on Manufactures, of which his friend and neighbor, the Honorable Daniel J. Morrell, afterwards President of the American Iron and Steel Association, was the chairman.

The defeat of Mr. Morrell for reelection in 1870, and his retirement from Congressional life in 1871, ended Mr. Swank's services with the committee, and he was appointed a fourth-class clerk in the Department of Agriculture, being assigned, at his own request, to the division of statistics. Within six months he was made Chief Clerk of the Department. Even at that early date investigators from all parts of the world visited the Department, seeking information about its history and its work, but there was no record of these in print at that time. To fill this lack Mr. Swank, thus early displaying his historical sense and love of preserving a record of the country's progress and development, wrote the

first History of the Department, a volume of one hundred pages, doing the work at his home in the evenings after office hours, without the aid of a stenographer or typewriter.

II.

It was while he was Chief Clerk of the Department of Agriculture that he was chosen secretary of the American Iron and Steel Association, assuming the duties of his new position on the first day of January, 1873. With no special training except the practical experience gained from his clerkship with the House Committee on Manufactures, and his work in the Agricultural Department, he had natural qualities of mind which fitted him for the faithful collection and presentation of statistical evidence relating to the leading manufacturing industry of our country. For this ability, as developed, much credit must be given to his early teachers and to the invaluable experience he gained as the editor and manager of the "Johnstown Tribune."

Although the American Iron and Steel Association had been founded in 1855, and reorganized nine years later, it was ill equipped in 1873 creditably to serve the industry it represented. From 1855 to 1859 Professor J. P. Lesley, the Association's first secretary, had published an "Iron Manufacturers' Guide," which was a directory to the furnaces, rolling mills, and forges of the country, but the lapse of years had made it useless for practical business purposes. Realizing, upon assuming his duties as secretary in January, 1873, that the office possessed no list of the then existing iron and steel works of the country, without which one important purpose of the Association, as set out in the constitution — "to procure regularly statistics of the trade, both at home and abroad," — could not be carried out, he began within three months to prepare such a list, a task completed about a year later. During the summer of 1873, however, a list of the blast furnaces and rail mills was compiled, and also the statistics of their production, information which was published in his first annual report, issued in November, 1873. This was the modest beginning of the now very comprehen-

sive "Directory to the Iron and Steel Works of the United States," seventeen editions of which, with several supplements, have since appeared. The "Directory" was at first published at two-year periods, and more recently at less frequent intervals, supplements appearing in 1900, 1903, 1910, and 1912.

III.

Going to the Association at a time when the strength of the party which had passed the Morrill tariff of 1861 and successive protective tariff measures was beginning to wane Mr. Swank was obliged almost immediately to devote much of his time and attention to defending the principles of protection and meeting the attacks of the party of free trade, aided and supported by the Cobden Club of Great Britain. For sixteen years, from 1872 until 1888, there was poured into Congress a steady stream of bills aiming to reduce the tariff on many products, particularly on iron and steel, and this industry constantly faced the prospect of a return to the crushing competition of early days, when the American manufacturer was able to keep just so much of the domestic trade as the English exporter did not care to grasp. Mr. Swank was thoroughly aroused to the danger of the situation and for many years was active in the defense of protection in the columns of the "Bulletin" of the Association and in a series of tariff tracts, many of which were issued in the years after the panic of 1873, to counteract the efforts of British agents to create the conviction that the cause of that disturbance was our protective system.

In 1876 Mr. Swank, seeing the attack made upon protection by those lately returned to power in Congress, presented in his Annual Report a carefully prepared and elaborate sketch of the industrial policies of Great Britain and the United States, in which he described how the industries of the former country had been built up by a most rigid system of protection, and the effort that it was then making to maintain its industries by forcing upon other countries free trade or a tariff-for-revenue policy. Afterwards he was

an active and effective opponent before Congressional committees of the Fernando Wood bill in 1878, the various Morrison bills, the Mills bill, the Wilson bill, and of every bill whose object was the substitution of a revenue for a protective tariff.

When the Cobden Club openly aided and abetted the effort to overthrow protection in this country his fighting spirit was intensified and his efforts to repulse these hostile attacks were redoubled. In the years 1880, 1881, and 1882 he sent throughout the West and South more than a million copies of his tariff tracts. In these and other years he represented the iron and steel manufacturers in every tariff campaign at Washington and made himself invaluable to them. Had it not been for the courage, watchfulness, resourcefulness, and patriotism of our ironmasters and steel makers and their adroit and able secretary the alien efforts to influence and control the tariff legislation of this country would have succeeded, and our manufacturing industries, which have become the wonder of the world, would to-day be few and weak indeed. But for the courage of these men in resisting the arrogant pretensions of Great Britain Congress would have withheld the protection (as it is now about to do) needed then to establish and develop, and now to maintain, the manufacturing industries of our country. So successful was Mr. Swank in these contests that he was able to say long years afterwards that not until 1909 did the Association lose a tariff battle, — truly a remarkable result, for which this one, strong, able, and commanding man was largely responsible.

The worth of these services was acknowledged by a prominent manufacturer, who recently wrote: "When we were fighting for existence none of us thought of going to Washington without having Mr. Swank at our elbow. We depended entirely upon him for facts and figures, and many of his promptings and suggestions went before the committees and were adopted;" and Mr. Andrew Carnegie has declared that "iron and steel owe an unpayable debt to Mr. Swank." So fair was he in the presentation of his statistics

and his arguments that Senator Morrill, of Vermont, an honored and able Senator, once said that "he and his colleagues relied more upon the statistics and opinions of Mr. Swank concerning iron and steel than upon those of any other man or of most others combined."

At this time, when it is popular to assert the existence of "a powerful and concerted lobby," exercising its sinister influence over Congress, it is well to recall the plain, broad, and comprehensive statement made by the late Dr. John Lord Hayes in his annual report for 1886 to the National Association of Wool Manufacturers. What he then stated applies equally well to the American Iron and Steel Association and to Mr. Swank. Dr. Hayes wrote: "If we have not done those things which we ought to have done, I think we have a right to say that we have not done those things which we ought not to have done. I cannot recall a single act of this Association which I would blush to lay open to the world. In the most critical emergencies of legislation not a single dollar has been spent directly or indirectly to secure a vote or to influence press or lobby. Not a single movement has ever been made to reduce the prices of labor, to resist labor organizations, or to control production. No combination has been permitted to oppose obnoxious patents or diminish the prices or protection of auxiliary industries furnishing machinery, supplies, or raw materials. Even in the movement to restore wool duties not a letter was written from our office nor was any personal influence, with the sanction of the Association, brought to bear upon a member of Congress to counteract the movement. *Not a cent of the funds of the Association has ever been expended for convivial purposes or social influences, nor a dollar appropriated to a political organization for a political object.* These, it is true, are merely negative virtues, but the consciousness that we may rightfully claim them gives us the satisfaction of feeling that, if we have not exalted, at least we have not tarnished, the fair fame of American industry."

IV.

While Mr. Swank was, and still is, a pronounced and firm believer in a protective tariff, and its necessity for this country (a disciple of Mathew and Henry C. Carey, Stephen Colwell, and Dr. William Elder), he was not a selfish protectionist; not one of the kind who, if adequate duties for his industry were granted, was willing to favor free trade in hides, or shoes, or wool. He was always able to see something beyond iron and steel. Because of this spirit he and the Iron and Steel Association have always contended for a tariff that would adequately protect all the country's industries. Had this unselfish and wise policy governed all our professed protectionists the opportunity would not now have come to the people of the South, unable to understand the needs of the commercial and industrial North and consequently unfit to legislate for them, to resurrect the slumbering question of free trade, and under the leadership of our academic President, to deal protection, in the words of an exultant London paper, "its heaviest and not its last blow."

His intimate knowledge of conditions under the protective tariff of 1842, which stimulated the *production* of pig iron, and of the *ad valorem* tariff of 1846, which stimulated its *importation*, warns him now of the necessity of a protective rather than a "competitive" tariff. He believes that the great industries of the country, whose managers cannot be indicted for lack of efficiency or enterprise, will be unable to stand up under the reductions fixed by the Underwood bill, and he looks for the approach of a strenuous period within a short time after it becomes a law. All that is needed to invite invasion of this market, the best in the world, is a lowering of the Payne duties sufficiently to enable importations to be made. The largest corporations may be able to meet this invasion, but by exposing our iron and other industries to the keen competition of countries with lower manufacturing costs the heaviest blow will be dealt to the smaller and weaker partnerships and corporations which, lacking sufficient capital to withstand the assault, will be the first to feel the shock and the first to succumb. Demanding competition,

and denouncing industrial concentration, the sponsors of this tariff bill are hastening the discomfiture and downfall of those for whom they profess the greatest sympathy.

In the nineties, when farm produce was selling for extremely low prices and the farming classes were discouraged, the cheapness was attributed to the Money Trust and the tariff. During recent years, when the prices for all farm produce have been at a very high level, and the cost of living to the city-dwellers was causing hardship, monopoly created by the tariff was again given as the patent cause of all our ills. To-day those who favor a heavy reduction of tariff duties and demand the sacrifice of industries because they are "inefficient, not worth preserving, and economically unjustifiable," vehemently demand fewer hours of labor, higher and ever increasing remuneration for the wage-earners, and at the same time cry out for lower and ever lower prices for the consumer.

While Mr. Swank, in his long experience, does not recall a more discouraging time for protectionists than the present, yet he does not despair, basing his faith on the final good sense of the American people and the knowledge that in former desperate times deliverance came from like perils. He has no thought of surrender, for he confidently expects an overwhelming reaction to follow this onslaught before the Underwood tariff is a year old. Necessarily the country must go through a period of depression, but his faith is clear that the party of protection will again triumph in the elections soon to be held.

v.

In addition to his arduous work in editing the "Bulletin" of the American Iron and Steel Association and its other publications, and in combating hostile and violent attacks upon protection in general and the iron and steel duties in particular, Mr. Swank has made himself an authority, accepted in all countries, upon the history and development of our iron and steel industries, teaching especially the value of trustworthy statistics, promptly collected and promptly made

available. As a statistician he has gained for himself not only a national but an international reputation for the accuracy, value, and comprehensiveness of the world-wide data he has collected and published. In this field he was a pioneer, for not until he showed the way had such statistics of any great industry, at home or abroad, been gathered and published from year to year by any agency whatsoever. So valuable was this work regarded that the promoters of the British Iron Trade Association, which represents an industry that was well developed before the American iron industry was scarcely more than started, based their statistical methods on those of their American prototype.

Mr. David Reeves, president of the Phoenix Iron Company, in publicly recognizing the value of Mr. Swank's work in this field, recently wrote: "The statistics of the iron trade which he has formulated and brought down from the beginning of things to the present time will always stand as a monument to him." And the editor of an important domestic trade journal has said, "Mr. Swank's reports won commendation at home and abroad, and to-day he stands as the most eminent iron and steel statistician the world has ever known." That may seem to be strong praise, but the same cordial appreciation of his work was paid Mr. Swank by Dr. E. Schrödter, General Manager of the German Iron and Steel Association, who, in offering congratulations and best wishes upon Mr. Swank's eightieth birthday anniversary, wrote: "Together with the whole American iron industries we take this opportunity to thankfully acknowledge the eminent service that you have rendered, not for the United States only but also for the iron industries of the whole world, through your exemplary labors in the collection of the statistics of our products. Your name will be linked for all time with this excellent collection of statistics." And Mr. C. J. Fairfax Scott, Secretary of the British Iron Trade Association, in sending his word of congratulation, added: "It must be a source of great satisfaction to yourself to be able to look back on so many years of active usefulness in

the interest of what is the greatest manufacturing industry in the world."

VI.

Notwithstanding his multifarious duties, and many demands upon his strength, Mr. Swank has found time somehow to collect material for and to write and publish a number of historical volumes, all relating to our national, economic, and industrial policies and to the development of the industries of his great native State. "The Industrial Policies of Great Britain and the United States" was published in 1876. It is an exhaustive historical review of the economic policy of each country, and a spirited and effective defense of the protective principle.

In the summer of the following year, amid the pressure of other duties, he wrote, at the request of the Pennsylvania Board of Centennial Managers, "An Introduction to a History of Iron Making and Coal Mining in Pennsylvania." This work attracted the attention of General Francis A. Walker, Superintendent of the Census of 1880, who engaged Mr. Swank as special agent to collect for that census the statistics of iron and steel and accompany the figures with a historical sketch of ironmaking in colonial times and of its later manufacture in each State and Territory. The task undertaken for the census resulted in the acquisition of a great mass of information which could not all be used in his sketch. He was not satisfied until the story of the beginning and growth of the iron industry in the United States had been so expanded as to include its history in all ages and in all countries. The first edition of this monumental and authoritative work appeared in 1884, and the second edition, containing one hundred and thirty-two more pages of historical details than the first, was brought out in 1892. This was no easy task, for he blazed the trail in a practically unexplored field, no historical record of the iron industry of like scope having been previously undertaken.

Like so many others who have been the most conspicuous and valuable men of their generation Mr. Swank, though not

a college-bred man, gained culture and style by wide reading and study in his chosen fields. He delved deeply into the history of the industry with which his name has been so closely identified for many years. His liking for research enabled him to discover and rescue for preservation in the volumes he has written facts of the utmost importance to the industry whose historian he became. Besides his natural bent in this direction he was fortunate to live during his early years in that section of his State where the development of its industries was even then giving some token of the tremendous expansion which was to occur in the years immediately following. His knowledge of the technical side of the industry, his intimate acquaintance with many of the leading actors in it, and their faith in him, all helped greatly to fit him for the collection and winnowing of the information gained, while his literary skill enabled him to present his story both in a readable and authoritative form, so that his book, "History of the Manufacture of Iron in All Ages," will stand as a monument to his patient investigation, his deep research, and his clear presentation.

In 1897, at the end of twenty-five years in the service of the Association, Mr. Swank published a volume entitled "Notes and Comments on Industrial, Economic, Political, and Historical Subjects." Its thirty chapters were not written consecutively for publication in book form, but at different times, some of which appeared in the pages of the "Bulletin" of the Association, and all of which are of interest to the student of our industrial and economic history. The words he wrote concerning the Wilson bill in his preface are particularly applicable now and are worth quoting. He then said: "The British theories underlying the Wilson tariff of 1894 were precisely the same as those upon which the Walker tariff of 1846 was based. In fifty years the country has moved in a cycle of so-called political economy and apparently learned nothing."

In 1908 his "Progressive Pennsylvania," which was to be his final contribution to the industrial history of the country and particularly of his native State, appeared. In this vol-

ume are chapters devoted to the early days of the province, the various people who settled the State, the early systems of transportation, the subsequent turnpikes, canals, and railroads, and the industries which have made Pennsylvania one of the great industrial commonwealths of the country. As the fortieth anniversary of his election as secretary approached his mind not unnaturally turned to the home of his youth and he printed another volume, "Cambria County Pioneers," a compilation chiefly of biographical and other sketches, written at different times and for various occasions.

VII.

The manufacture of steel developed slowly in the United States. Prior to 1860 the manufacture of the best quality of cast steel was hardly in existence, and as late as 1850 there were but five establishments in the country which made steel of any kind. During Mr. Swank's lifetime most important improvements have been made, by which the industry has been revolutionized and from which most marvelous results have been obtained. He has seen charcoal supplanted as a fuel by raw coal and it in turn by coke, which is now almost the universal blast furnace fuel. He has seen the old Catalan forge, so numerous in many States in the early years, entirely disappear and be almost forgotten. He has seen the iron rail give way to the steel rail, and the iron bridge succeed the stone arches and the wooden structures, and the use of structural steel in our modern great sky-scrapers completely change the aspect of our American cities. While the iron industry has been transformed it has been able, with the aid of a protective tariff, to increase the country's production of all kinds of pig iron from 2,560,963 gross tons in 1873 to 29,726,937 tons in 1912. At the same time the production of all kinds of steel shows an equally amazing growth, from 198,796 gross tons in 1873 to 31,251,303 tons in 1912.

Mr. Swank has had the satisfaction which few men enjoy of seeing come to fruition during his years of activity the expectations he cherished and the predictions he made. He has seen the iron industry grow from insignificance to a

position of greatest importance at home, yielding a tonnage larger than the combined output of our two greatest rival producing countries, Great Britain and Germany, and sending its products to the uttermost parts of the world. He can truthfully and with satisfaction exclaim, "All of this I saw and much of this I was."

Mr. Swank is as modest as he is able. In his long career he has proved himself a wise counsellor, a courageous advocate, and a friend who is endeared to his associates by his gentleness, firmness, and courtesy. John Fritz, great engineer and manufacturer, has said, "He is a stranger to deceit and has stood for all that is fair between man and man." He is a true gentleman of the old school—a fine example of an American citizen. Reared in the rigid atmosphere of a Calvinistic community his character was early and well formed, with the result that through life he has held steadfast to the truth. He has gone through many Congressional tariff contests not only without aspersions being cast at him but without stain attaching to his name.

He has spent a useful and honorable life. Full of honors and full of years, having lived far beyond the time allotted to the average man, he has asked and has earned relief from the cares and responsibilities of the important position he has so ably and so creditably filled for forty years. He retires honored at home by all who know the value of his services to the iron and steel industries of his own country, and respected abroad for invaluable statistical and historical work done for these industries in all countries. Antiquarian, historian, economist, statistician—his fame is secure and his name will be cherished and revered wherever the triumphs of the American iron and steel industries in the past century are known and recorded.

ARTIFICIAL SILK.

By HOWARD PRIESTMAN, Bradford, England.

It is a relatively easy thing to lay hands on the patent specifications of all the processes of manufacture of artificial silk. It is quite another thing for any one to pretend to full knowledge of the details that make one factory a commercial success whilst another (using nominally the same solvent and the same coagulating bath) may be producing a much inferior article.

This, however, is no justification for the profound ignorance which prevails in many quarters in regard to all kinds of artificial silk, and it is high time that a few leading facts were made accessible to the interested public. At present even the terms of the trade are shrouded in mystery, and the names of spinners like Courtauld are associated with words like Chardonnet, Cuprammonia, Viscose, Glanzstoff, Nitrocellulose, and Sthenosé in the most bewildering fashion.

NITROCELLULOSE.

The oldest of all artificial silks, that of the Count H. de Chardonnet, is made by the nitrocellulose process. This worthy savant foresaw that if he could obtain a suitable jelly it would not be impossible to produce fibers by forcing it through exceedingly small holes in exactly the same way that silk is formed as it issues from the spinnerets of a silk worm. It is possible, for example, to make fibers of gelatine in this way; but no one has yet devised a modification of gelatine that makes fibers strong enough for commercial use.

As long ago as 1884 practical chemists had come to the conclusion that cellulose, the material that forms the bulk of all vegetable tissues, might be used as a basis for artificially produced fibers. It exists in almost the same chemical condition, whether it be the core of a pine tree, the bark of a willow, the stalk of a grass or the seed of a flower. All these things are used in the textile industry already, under various

forms. All but the wood already provide fibers of great relative strength for the textile trade. It was therefore early realized by chemists that, if they could form a solution of cellulose, if in other words they could dissolve cotton and produce a jelly, just as a jelly is produced by dissolving gelatine in water, they would have advanced a long way towards the production of a vegetable silk.

It is very doubtful if the most sanguine of the early research workers realized how wonderful would be the results that their successors would achieve. None the less they pursued the laborious tenor of their scientific way and it fell to Count Henry de Chardonnet to make the first artificial silk fiber that was a commercial success. This does not mean that he was the first inventor, for an Englishman named Swan took out a patent for making a fiber from nitro-cellulose in 1883, No. 5978.

Properly speaking, they did not succeed in dissolving cellulose or cotton, which is almost pure cellulose. Cellulose is composed of carbon, hydrogen, and oxygen, and before they succeeded in dissolving it they had to convert it into a compound called nitrocellulose or gun cotton. It is exactly similar in appearance to cotton, but in addition to C and H and O it contains a proportion of nitrogen, in other words it is nitrated. Now nitrogen has one great drawback. The more of it there is combined with cellulose the more explosive does the mixture become, so that when seven parts are added, and a penta nitrocellulose is formed, we have a very dangerous compound indeed. The best of it, on the other hand, is that these high nitrations, as they are called, are not soluble in any known spirit. It is the lower combinations containing only 3 and 4 parts of nitrogen that are most easily soluble in alcohol mixed with ether, and even these are inflammable enough in all conscience; so inflammable as to be very nearly explosive.

After the cotton is purified with caustic soda and thoroughly bleached, the nitrogen is introduced into it by treating it with nitric acid. But nitric acid alone was found to act very slowly and the cotton is now generally treated in a

mixture of the strongest oil of vitriol or sulphuric acid mixed in the proportion of 37 to 17 with the strongest fuming nitric acid.

It is surprising that the cellulose is not wholly destroyed or disintegrated by this treatment, but so far from this being the case it comes from this deadly acid bath very slightly altered in appearance. It is, however, increased in weight by 80 per cent, for it has not only become nitrated, that is to say absorbed nitrogen and oxygen, but it has also absorbed hydrogen and oxygen, which are present in the nitrated cotton or pyroxyline in the form of water to the extent of 45 per cent. This means, of course, that the cotton is continually robbing the acid bath of its most important constituents. But it is absolutely necessary that the bath should be maintained at full strength if all the cotton is to be nitrated to the same extent (which is essential) and supplies of fresh acid are therefore continually being added. The cotton remains in the bath from 60 to 90 minutes at a temperature of about 100° F.

In 1910 M. Beltzer estimated that if the acids were not recovered this process would cost 2 shillings in nitric and sulphuric acids alone, per pound of cotton treated, and that it would be reduced to one-half of that figure if the best recovering plants were installed and if the nitric acid were prepared from the nitrates of the Norwegian Power Company. This firm reduces the nitrogen of the air by means of a very powerful electric plant, and M. Beltzer also suggested that similar plants might be installed with advantage by large users of nitric acid.

Provided that the strength and temperature of the acid bath have been properly maintained, the cotton will all be uniformly altered and will become a tri-nitrate of cellulose which is called pyroxyline. At best the use of such concentrated solutions of powerful acids must always be attended with difficulty, but the process has been largely worked in practice and the difficulties must not therefore be regarded as insuperable.

The pyroxyline is now washed in a very large quantity of water to ensure the removal of all traces of uncombined

acid. It is then whizzed and whilst it still contains 20-30 per cent of moisture it is dissolved in a mixture of alcohol and ether (60 alcohol, .794 S.G. ; 40 ether, .720 S.G.).

Seventeen to twenty-three kilograms of pyroxyline go with 100 liters (757 kilograms) of the mixture making a solution of from 22.4 per cent to 30.2 per cent in strength. Under perfect conditions this solution should be quite transparent, but a certain amount of opacity is often visible. It is due to several causes. The presence of fulmi cotton, or superfluous water, or acetone may any one of them be responsible, and if silk of high luster is desired the fault must be eliminated. Of course, if it is to compete in the open market, the silk must have the very highest possible luster and therefore the excess water or the last trace of acetone *must* be removed, whatever the trouble or cost. Nothing can better illustrate the necessity for care over the minutest details than do these facts. They bring out the necessity for endless vigilance in the management of every process, and go to prove what has already been said, that of two places running on the same process with the same patents, one may be successful and the other may fail to make a commercial article.

Once the cotton is dissolved in the mixture of ether and alcohol, one might reasonably expect that most of the difficulties would be over, but that is far from being the case. It is obvious that if the solution contains only 20 per cent of cellulose, it must lose four-fifths of its weight as it emerges in fibrous form, from the capillary openings through which it is pressed. One would think that less than that strength of solution could not be expected to give a satisfactory thread. But as a matter of fact even a 10 per cent solution is so dense or viscous (or, in common language, gives so thick a jelly) that a pressure of 600 pounds per square inch or 40 atmospheres are required to drive it through the draw plates.

For some unexplained reason if 5 to 10 per cent of sulphuric acid (some other acids will also do) be added to a 30 per cent jelly it becomes at once quite limpid and so much

less viscous that it will easily spin at a relatively low pressure.

A solution of cellulose in alcohol ether is really a collodion and directly the infinitely fine fibers emerge into the air, so much of these volatile solvents at once evaporate that an outer skin immediately forms on the surface of each fiber and encloses the still liquid collodion within it.

From this collodion the ether evaporates more rapidly than the alcohol by ozmotic action, and the fibers decrease in volume on the bobbin onto which they are wound. The spinning (if pressing jelly through fine holes can be called spinning) takes place in a very moist atmosphere at 59°–68° F., but the nearer it is to 68 the better; for below 66° the silk is apt to be opaque. On the contrary, its brilliance may be considerably enhanced if it be treated with gaseous ammonia at a temperature between 59 and 77° F.

If the yarn is run through water, the fibers all maintain their original diameter, because the water changes places with the alcohol and ether through the newly formed skin of nitrocellulose. This moisture remaining within the fiber prevents electrical action, and by that means alone greatly diminishes the loss which otherwise occurs from breakage, etc. Moreover, such silk burns much less readily than one containing ether, which in itself is a safeguard of no small moment, so long as the water is retained.

Until the year 1900 nitrocellulose silks were sold in a very inflammable condition because of the presence of nitrogen, and moreover they were apt to decompose, giving off nitrous acid. Now, they are denitrated: but unfortunately they lose both solidity and elasticity in the process. Calcium and ammonium sulphate are used in the bath, 8 kilos of each being dissolved in 100 liters of water.

Beltzer advises the treatment of only 2 kilograms of silk per hectoliter (100 liters) of this bath. In the denitration, as already stated, the nitrocellulose loses 30 per cent of its weight and worse still it loses stability and strength. The former can be remedied or rather obviated by adding acetic acid or nitrite of ammonia to the alcoholic solution. The

latter, say the chemists, is as yet not fully obviated by any known method. However this may be in theory, some variations of this type of silk are at present on the market and give most excellent results in the testing machine. They are in fact the strongest, count for count, that have come under my notice up to the present time, though if specific gravity be taken into account the result is slightly reduced because, of the three processes which are at present being worked, the nitrocellulose silk of the Société Tubize is the largest in diameter for any given weight per yard of fiber.

The liability to disintegrate is also negligible in the same yarn, for a sample some years old is fully as strong as any in my collection.

One of the best known processes for preventing instability and consequent weakness after keeping, consists in treating denitrated Chardonnet silk in a bath of formaldehyde and acetic acid, after which it is dried.

To increase the resistance of the silk to the effects of water: formic, acetic or benzoic aldehydes may be added to the solution of nitrocellulose.

The Cuprammonia process is most widely known under the name of Glanzstoff. The original factories of this firm were "Les Usine Glanzstoff" near Mulhausen. But of recent years an Austrian Glanzstoff Fabrik has been opened in Saint Polten in Hungary. Silks of this description were known as early as 1892.

The raw material of this process is ripe cotton or wood cellulose, chemically prepared. One authority states that cotton is more generally used and may safely be considered as the standard base, but there is reason to believe on the contrary that purified wood pulp exceeds the quantity of cotton. The cotton itself is usually purified very thoroughly before it is used. To this end it is boiled and bleached with great care to avoid the formation of hydrocellulose and oxycellulose, the latter especially being very easily produced in the chloride treatment. Hydrated cellulose which is obtained by mercerization is on the contrary distinctly advantageous.

To the man in the street it must appear that these are

very fine distinctions, and that is indeed the fact. But it is equally true that very small alterations in chemical combinations cause very great differences in the substances they compose and it is therefore necessary to make these distinctions as plain as they possibly can be made for the benefit of those practical men who are interested in the industry, but who lack an advanced training in organic chemistry.

Pure cellulose as it is known to chemists consists of $C_6H_{10}O_5$. The constitution of oxycellulose or hydroxycellulose is so complex that there seems to be no real certainty as to their actual composition, but Cross & Bevan give the empirical formula of $C_6H_{10}O_6$ as representing oxycellulose. This would mean that the material had absorbed one part more oxygen. In other words, that it had been oxidized. Whether this be the accurate statement of the case or not we need hardly stop to consider in detail here, for other chemists regard oxycellulose as being really an hydroxyl with a formula of $C_6H_{10}(OH)O_5$. All that is necessary at the present moment is a realization of the fact that cellulose does absorb oxygen when in the presence of oxidizing agents, though expert opinion appears to differ as to whether some hydrogen goes with it or not.

The second thing to be feared is the formation of hydrocellulose. About this there is less doubt. Its formula is accepted as $C_{12}H_{22}O_{11}$ which may be stated as $2(C_6H_{10}O_5) + H_2O \pm$. In other words, one molecule of water is added to two of cellulose and combined with the other constituents. It is in fact a chemical combination which actually alters the properties and character of the material itself.

But it is not desired to alter the character of the cellulose. It is in fact highly undesirable and therefore the production of hydrocellulose must also be avoided. Now comes the finest distinction that has to be made. We have already seen that water that combines with the cellulose as separate molecules of oxygen and hydrogen is highly undesirable because it forms hydrocellulose, a brittle compound of an unsuitable character.

It is formed when cotton is carbonized. That is to say

when cotton is treated with a 4-7 per cent solution of sulphuric acid or with hydrochloric acid fumes. This treatment leaves some part of the water of combination in such a condition that when heat is applied, the cellulose is converted into a friable hydrocellulose which falls to powder when it is crushed or violently shaken. But water that remains water of combination and must always be stated in conjunction with cellulose as $N(C_6H_{10}O_5) + N(H_2O)$ is the very reverse of bad; it actually helps the cellulose to dissolve easily, and for that reason everything possible is done to hydrate the cotton before it is treated in the cuprammonia bath.

Water of combination acts in this way in quite different substances. Take, for example, carbonate of soda. There are carbonates of soda that cake rather than dissolve in water, but if the carbonate be crystalline (that is, if it already contains some water) it dissolves with much greater facility: in fact it dissolves instantly. Now it is possible to introduce water into the substance of the purified cotton or cellulose in a relatively simple manner. That is by mercerizing it. Mercerized cotton is to all intents and purposes hydrated cellulose and mercerizing, such as is necessary for this particular purpose, consists principally of treatment with concentrated solutions of caustic soda.

Supposing then that we have cotton or other raw material from which the gum has been removed by boiling, it is treated for two or four hours in a weak bleaching solution containing at most one or two grains of active chloride per liter. Either before or after this treatment the cellulose is submitted to a process of energetic hydration by treating it for an hour in a cold concentrated solution of caustic soda of about 33° Beaumé; after which it is thoroughly washed. If the cotton is bleached first and hydrated or mercerized afterwards, it may again be treated in quite a weak bleaching bath should the solution be required in a less viscous condition. Cold solutions have a greater effect than hot ones, a solution at 80° Centigrade with a density of 28° Bé. having just about the same effect as one of 180° Bé. when cold. Hydration or mercerization causes the fibers to swell and to shorten in length. It

also takes out the twist, which is so typical a feature of the cotton fiber.

It must not be taken that this, which is the most common, is the only possible means of hydrating cotton. There are many others, any one of which may be employed, provided only that it is followed by a bleaching bath containing at most 2 grams of active chloride per liter. Or if hydro- and oxy-cellulose are present, they should be eliminated previously by treatment with a weak solution of boiling caustic soda of a strength of 1° or 2° Bé.

The cellulose still humid may then be dissolved in an ammoniacal solution of copper.

One of the chief difficulties of the cuprammonia process appears to be the preparation of the liquid which will dissolve the cellulose. Taking the various methods in order of simplicity, that of Bronnert and Fremery comes easily first, for they obtain a solution of cupric hydroxide by the simple expedient of filling a tall cylinder with copper turnings and ammonia and then causing cooled, compressed air to bubble up through the said cylinder for a space of 10 hours. In this case the apparatus must be kept below 41° F. or the hydroxide would decompose.

It is impossible to estimate to what extent this system is adopted in practice, but it may be said with little fear of contradiction that commercial copper sulphate or blue vitriol is the material most commonly used to obtain the necessary combination of copper and ammonia in all the other methods.

For example, according to Beltzer, Reisenfeld and Taurke, dissolve cellulose in a solution of copper carbonate in ammonia and precipitate it or coagulate it, as it emerges from the spinners by salts, acids or alcohols. In this case sulphate of copper is dissolved in water with a theoretically correct quantity of carbonate of soda. A green precipitate is recovered on a filter. It is thoroughly washed and then simply dissolved in concentrated ammonia. By this system a solution is obtained that may contain 10-15 grams per liter of copper. It will be capable of dissolving 45-50 grams of cellulose and

will form a solution of sufficient viscosity to yield satisfactory fibers when decomposed or consolidated in sulphuric acid.

In regard to these processes it must be borne in mind that the power of solution of cellulose depends on the amount of metallic copper present; the relation of copper to cellulose must be 64-162, and it is for this reason that solutions of copper hydroxide take preference to solutions of copper carbonate.

Freidrich's French patent of 1909 may be taken as suggestive. He dissolves 4,000 grams of sulphate of copper in 1,500 cubic centimeters of water and adds 2,410 cubic centimeters soda lye of 38° B \acute{e} . and 1,000 cubic centimeters of water, then adding 20 grams of dextrine. Two hundred grams of cut up cotton is then introduced and, after the treatment, all that is solid is removed from the solution by filtration. One thousand cubic centimeters of ammonia are added to the resulting fibrous paste, which consists of a mixture of hydroxide of copper and 200 cubic centimeters of cellulose. In a short time a perfectly homogeneous solution is obtained, obviously containing 200 grams per liter of cellulose.

As an 8 or 9 per cent solution is as viscous as desirable, suitable viscosity can be obtained by simply adding ammonia, and dense bright threads can thereby be obtained.

Although this solution may appear perfect, it is sure to contain cotton fibers that are very much swollen, without being really dissolved, and as these fibers would at once block the spinnerets if they were not removed, the liquid is always filtered before it is spun. As a rule it is placed in a strong closed vessel at the bottom of which is a bed of asbestos felt, or other material, entirely unaffected by cuprammonium. Through this it is forced by the action of compressed air and the filtered solution is then uniform and ready for spinning.

The solidification of the solution as it emerges from the spinnerets is usually effected in sulphuric acid, but it is a most curious fact that a solution of caustic alkali will also effect solidification. This latter, however, has a drawback, in that all traces of the alkali must be completely removed by

a subsequent acid bath, or otherwise the threads would lose their strength, becoming more and more transparent and elastic. Alkaline bisulphates and sulphuric acid have the double advantage of being low in price and of producing bright and well conditioned threads. If for any reason threads of less solidity are desired, precipitating baths of acetic acid may be used, but as strength is one of the most desirable properties of artificial silk, it is seldom that this more expensive precipitant is employed. Acid baths of different strengths give very different results. Dilute sulphuric acid (of from 10-20 per cent), for example, causes imperfect precipitation and the threads lack both suppleness and solidity. On the other hand, very strong baths of the same acid have too energetic an action if the cuprammonium solution of cellulose is driven straight into them from the spinnerets, and coagulation takes place so rapidly that it is difficult to deal with the fibers at sufficient speed. It has proved satisfactory in practice, therefore, to coagulate in two solutions the first effecting partial solidification, being of only 15-20 per cent strength; the second of a strength of say 50 per cent completes the solidification and the combination of the two enables the fibers to be wound with a minimum of breakage.

Alterations in temperature have a great effect on the action of the baths and must be carefully considered.

Most users of artificial silk are aware that its brightness depends, not only on the smoothness of its surface, but also on the straightness of its fibers. It is therefore the business of the spinner to ensure that every fiber is as straight as it can be made. The weak acid bath only solidifies the extreme outside of the fiber, leaving all the center portion still gelatinous of fluid. In this condition, extremely weak and elastic, it is wound onto glass or porcelain rolls revolving in the stronger bath, and there it is left long enough to ensure complete acidification. It is then washed, still on the rolls, till every trace of acid is removed, when it is taken to a drying chamber where all the moisture is slowly evaporated. During these last three processes the tendency of the fiber to

contract is used together with other means to keep every fiber under tension. This is particularly the case in the drying. The difference between dry length and wet length may vary by as much as 10 per cent and therefore the tension on the yarn in the drying may naturally be very considerable; sufficient at least to ensure a condition of the greatest possible luster.

VISCOSE SILKS.

Viscose is the name now given to compounds produced by treating cellulose in the manner described by Cross, Bevan & Beale in their patent No. 8700 of 1892.

Stated shortly the product is obtained first by mercerizing cotton or other cellulosic substances with alkaline lyes and then exposing it to the action of carbon disulphide. When the reaction is complete the cellulose derivative may be dissolved in water, and this solution, which may be compared to a thin jelly, is so viscous that it is now generally known as viscose. The cellulose may be precipitated from this solution by the use of oxidizing agents, of which there are many. The patentees mentioned brine as one of the best, but they are said to have used alcohol as well.

In their specification they say: "We employ as our raw material any of the forms of cellulose such as that obtained from flax, hemp, wood or bleached cotton in any of its forms. We impregnate the raw material in any convenient way with a solution of caustic soda of 15 per cent strength, *i.e.*, containing about 12 per cent by weight of sodium oxide. Having removed the excess of solution by squeezing or by means of a centrifugal machine, we expose the material containing 3 or 4 times its weight of the solution and therefore from 40 to 50 per cent of its weight of alkali (Na_2O) to the action of carbon disulphide in a closed vessel employing from 30 to 40 per cent of the weight of the cellulose of the disulphide. In from 3 to 5 hours the reaction is complete." The result is a gelatinous substance which dissolves in water to a yellow and very viscous solution of xanthate of cellulose. This means in ordinary language that a jelly has been

formed which if forced through fine nozzles into brine or alcohol will yield filaments or fibers of cellulose.

Nine years later, in patent No. 3592 of 1901, the same patentees refer to their viscose of 1892 as a crude compound containing besides the alkali and the cellulose xanthate, various by-products such as sodium carbonate, and sulpho-carbonates, which are not only formed during the original reaction but progressively so long as the viscose is kept.

But they also claim that if the viscose is treated with weak acids the sodium and sulpho-carbonates may be got rid of and the cellulose compound contained in the solution can be precipitated by the action of brine or alcohol as a purified alkali cellulose, entirely soluble in water. These two forms of viscose, "raw" or "crude" and "purified," form the basis of all the commercial viscose silks at present on the market.

Now although these two patents successfully accomplished the solution of cellulose in a form from which it could be precipitated again as pure cellulose, there were several difficulties to be overcome before a lustrous fiber could be produced. For example, if the raw viscose were projected into brine or alcohol the resulting fiber was not lustrous; in fact, Justice Parker went so far as to say that the first person who devised a process whereby viscose could be used for producing filamentary material was Charles H. Stearn as stated in his patent No. 1020 of 1898. In this specification Stearn mentions alcohol, brine, and solutions of ammonium sulphate as satisfactory precipitating liquids, but added that he prefers a solution of chloride of ammonium. As a matter of fact, sulphate of ammonium has proved to be most suitable and was used both in England and Germany in working his patent. The patentee emphasized the necessity for the use of viscose prepared from a very pure cellulose, but did not propose to eliminate by-products. In other words he proposed to use the purest possible product obtainable under Cross & Bevan's first patent.

Soon after the publication of Cross & Bevan's 1901 specification, Stearn and Woodley also took out a second patent, No. 2529 of 1902, in which they describe the means of

eliminating sodium and sulpho-carbonate from crude viscose so as to produce a purified cellulose xanthate soluble in water or caustic soda solution, which solution they solidify in an acid bath. This patent also came before the Court and the judge decided that cellulose, purified under Cross & Bevan's second patent could be, and actually was, manufactured into lustrous and satisfactory threads under Stearn and Woodley's second patent of 1902, but that crude viscose could not be satisfactorily worked under that patent on account of the effervescence and deposition of sulphur.

It was not till 1906 that any improvement was effected on this method of manufacture. In that year Dr. Max Muller's patent 10094 claimed novelty for the use of a mixed bath of sodium bisulphate and sulphuric acid for the precipitation of cellulose from crude viscose. He suggested 40 kilograms of the salt in 60 liters of water plus 7 kilograms of 66 per cent sulphuric acid giving an acid concentration of 20 per cent and a sodium sulphate concentration of 22 to 23 per cent, the latter being a saturated solution. The Court already referred to, decided that he had, in fact, succeeded in producing exceedingly lustrous threads from viscose not purified within the meaning of previous patents. His patent was therefore held to be valid, although other workers brought forward the negative evidence that they could not produce satisfactory lustrous threads by the means stated. The Court admitted that he did not appear to use a crude viscose which bubbled in the bath but held that it was not purified in the meaning already set out. That is to say it might be mechanically purified as by filtration but not chemically purified as by Cross & Bevan's second patent.

There could not easily be more complete proof of the statement made in the opening lines of this paper, that very slight alterations of the same process may make all the difference between success and failure.

In this case the exact composition of the two viscoses was not disclosed, for though the art of making sodic xanthate of cellulose is common knowledge, it is impossible to say whether some slight modification in its manufacture was the cause of

difference in the brilliance of the resulting fibers or whether that difference in the samples made by two workers was due to some modification of the sulphate-acid bath.

Although the processes adopted for the manufacture of artificial silks differ so widely, the fibers and threads which are produced by them bear a wonderful similarity to one another. This is not a matter for surprise when we remember that chemically the products are almost identical. It is the object of all of them to obtain a fiber of pure cellulose, and when Chardonnet silk is denitrated, and when the copper is removed from that prepared by the cuprammonia process, the impurities present are really negligible.

The raw materials from which all are made affect the result no more than do the methods of manufacture. It is a common belief that silk made from wood is stiffer or more brittle than that made from cotton, but, as a matter of fact, wood and cotton might be used indiscriminately, or the cellulose derived from them might be blended, without producing sufficient alteration to enable a manufacturer to say which was which. This is of course due to the fact that both wood pulp and cotton are reduced to pure cellulose before they are dissolved. And whatever the chemical compound may be when in solution, the precipitating baths and after processes are designed to leave nothing but cellulose in the resulting thread.

Chemically, artificial silk has no similarity to the products of the silk worm. It is not analogous to synthetic rubber or synthetic indigo, which are respectively real rubber and real indigo, built up by chemists on methods entirely different to those adopted by Dame Nature in producing the original article.

This makes it the more remarkable that in appearance and in many of their physical attributes real silk and artificial silk have so much in common. Considerable care is needed in order to make a satisfactory comparison of them. It is well known there are many kinds of silk which differ from one another both in strength and luster. It is therefore very

difficult to say how much greater is the average strength of one than of the other. It can only be stated that the best silk is still by far the strongest fiber known, and for purposes of comparison a 3-ply Ormandy totaling 39 deniers is here given. It is not the best silk known, but it is a silk of high quality. Ten threads of this material show an average strength of 3.81 ounces, and an elasticity of $14\frac{1}{2}$ per cent in normal condition.

When tested immediately after being soaked in water they test 3.26 ounces and 19.4 per cent elasticity. That is to say, there is a loss of strength when the fiber is wet of under 15 per cent and by comparison a thread of 200 deniers would have a strength of 19.55 ounces dry and 16.7 ounces wet. These figures may be conveniently used for comparison.

The strongest artificial silk that I have yet seen when tested on the same machine which gave the above result showed 9.2 ounces for 200 deniers dry, and 2.5 ounces wet. Its elasticity was 9 per cent dry and $10\frac{1}{2}$ per cent wet. This is a gain in elasticity of only $1\frac{1}{2}$ per cent, but it shows that there is a loss in strength when wet, as compared with the dry material, of 73 per cent, against the loss in real silk of only 15 per cent under similar conditions. This is a bald statement which calls forcible attention to one of the peculiarities of the artificial fibers. It is a peculiarity that has existed ever since the invention of the material, but it is reassuring to know that modern products are much less affected by water than the early ones were.

It is of course a common gibe that fabrics of artificial silk will disappear if washed as other garments are washed. It is hard to say what may have happened to some of the very earliest fabrics, such as were produced from nitrocellulose before the process was complete, when denitration and the strengthening process or sthenosage were unknown. But such a statement carries with it an insinuation that never was justifiable in regard to products put onto the market. The artificial silks of to-day will all stand dyeing, and to those who are acquainted with the drastic nature of most dyeing processes it is not necessary to say more.

Nevertheless it is true that artificial silk is very seriously affected by moisture: not that moisture leaves it permanently weaker, but reduces it to one-third (sometimes one-quarter) of its original strength until it is dry again. Concerning this, it is highly desirable that the facts and nothing but the facts should be made known.

THE ADVANCE IN RECENT YEARS.

Probably the best way to show how much advance has been made of recent years is to go back to the earliest figures obtainable, twelve years ago. They are figures given by Strehlenert in the *Chem. Zeit.*, 1901, and are apparently based on a woven fabric, for they are expressed in kilos per square meter. Unfortunately the weight of the cloth is not available but, whatever it was, the results compare with one another as follows:

Chinese	silk had a strength of 53.2 dry and 46.7 wet.						
Chardonnet	"	"	"	"	14.7	"	1.7
Cuprammonia	"	"	"	"	19.1	"	3.2
Viscose	"	"	"	"	11.4	"	3.5

This shows that the real silk is 13 per cent weaker when wet than when it is dry, a result that is almost identical with that already given for silk tested in the unwoven thread. But it also shows that twelve years ago none of the artificial silks came anywhere near half the strength of Chinese silk, and one of them lost 88½ per cent of its strength when wet. Such a material must have been of little value, and if compared with the best viscose of the present day, the makers have every right to congratulate themselves on the advance that has been achieved in twelve years' time.

The following tests are all stated in terms of a thread of 200 deniers thickness or weight, and in this way the average strength per thread is found to be

Chinese	silk is 19.55 ounces dry and 16.7 ounces wet.						
Nitrocellulose	"	"	9.1	"	"	2.3	"
Cuprammonia	"	"	6.6	"	"	1.7	"
Viscose	"	"	8.24	"	"	3.25	"

It must not be concluded that these figures represent the best results obtained up to the present time. Each set represents a large number of tests made from at least two different yarns in each case. Some of the yarns were two years old. The point of chief interest lies in the fact that the different tests from yarns of the same make always gave remarkably coincident results.

INCREASE IN STRENGTH.

Firstly let us consider the increase in the resistance of artificial silk yarns when wet. Even in its infancy viscose silk though the weakest when dry was the strongest yarn tested by Strehlenert when wet, but even so it only tested one-thirteenth the strength of wet silk of the same size. To-day the respective strengths of wet silk and wet viscose are 16.7 and 3.25, the latter being one-fifth of the former, in other words, the discovery of more perfect methods, more particularly the process of sthenosage or reinforcing, has improved the resistance to water by over 150 per cent. This undoubtedly gives to viscose the first rank amongst artificial silks that can be obtained on the market at the present day.

ELASTICITY.

In elasticity different kinds of artificial silk show much greater variation than they do in strength. The following figures give the percentage of extension which a thread will stand before it breaks:

China silk,	dry, 14.5%; wet, 16.7%
Nitrocellulose silk,	" 8.5%; " 9.8%
Cuprammonia silk,	" 13.8%; " 13.0%
Viscose silk,	" 16.7%; " 26.2%

Here again in regard to elasticity, wet or dry, viscose silk is a long way ahead of other makes. It is, in fact, more elastic both when wet and when dry than is the best real silk. How far this peculiarity is of practical advantage to the manufacturer it is difficult to say, but users should be acquainted with the fact, and with its effect on their own particular branch of the trade.

COMPARISON WITH OTHER FIBERS.

Perhaps the figures will be more interesting if those of some better known materials are quoted against them. But it must be remembered all the time that threads of cotton and wool do not resemble threads of artificial or real silk. The latter really consist of a number of endless fibers lying parallel to one another with no break from one end of a spool to the other. Cotton and wool threads, on the other hand, are built up of an infinite number of short fibers, always less than two inches long in the case of cotton, and averaging about six inches in the case of wool. These fibers are bound together tightly by the twist that is put into cotton and wool yarns in the spinning process.

It is curious that with similar construction cotton and wool yarns should be very differently affected by water. If we reduce the tests of various yarns to their equivalent at 200 denier, which is equal to $2/53$ cotton, or $2/80$ worsted, we find that

Botany wool tests 4.6 ounces and breaks with 7.7% elasticity, dry.

Egyptian cotton tests 13.0 ounces and breaks with 6.0% elasticity, dry.

When wet the results are:

Botany wool tests 3.85% and breaks with 33.4% elasticity.

Egyptian cotton tests 12.9% ounces and breaks with 8.2% elasticity.

That is to say, wool loses 17 per cent of its strength and increases in elasticity by 430 per cent. Cotton, on the other hand, loses no appreciable amount of strength, and only increases in elasticity by about one-third, or 33 per cent.

In both cotton and wool $2/40$ yarns of superior quality were selected for comparison with twists not alike, but respectively suited to cotton and to wool. The results were then reduced to their equivalent at 200 denier. It must therefore be borne in mind that twist must play some part in the above results, and that they would certainly be modified by other investigators, but the outstanding facts will remain.

Of all fibers cotton is least affected by water. Some cottons lose nothing in strength, and gain only 30 per cent in

elasticity. The China silk comes next, losing 14.3 per cent in strength, and gaining 15 per cent in elasticity. Wool is a good third, much better than some silks, for it loses only 17 per cent of its strength when saturated with water. In regard to elasticity it is, however, in a class by itself. When dry, the extension of a thread before it breaks is quite low, being only 7.7 per cent; when wet some threads may extend as much as 40 per cent, and 33 per cent is an average. That is to say, the extension wet is four times that of the dry thread.

It is this peculiarity of wool that makes the application of water such a risky matter; methods that can be applied to cotton with advantage, would spell red ruin to any one who tried them on the animal fiber. Not that the writer proposes to deal with such faults in this paper. The facts are mentioned because many faults of wool fabrics, and especially worsted fabrics, are to be found in an exaggerated degree in artificial silk.

No one will be surprised at this when they remember that the best artificial silk loses 66 per cent of its strength when thoroughly wetted, and that in that condition viscose extends, as already stated, by 26 per cent of its length before it breaks. That this property has great bearing on the difficulties that occur in its manufacture the writer has very little doubt, but it is not the breaking strain elasticity so much as the elasticity under much lower tensions that is of the greatest importance.

It is possible to find in more scientific treatises than this, exactly how much water various samples contain under various conditions and how much moisture affects the diameter of individual fibers. These things have not nearly so much interest for the practical man as has the effect of moisture on the length of the yarn. Many users know that yarns will extend in length when wet; perhaps few know how rapidly they do so and under how little tension.

It is a very simple experiment to suspend a spool weighing one ounce by a single strand of 150 deniers artificial silk from the edge of a table. Let the bottom of the spool be 2

inches from the floor, then moisten the finger and run it up the thread. It will be found that this very elementary conditioning process has extended the thread so much that the spool will be resting on the floor. That is to say the different qualities will extend to various amounts, ranging from 2.7 per cent in the case of the best reinforced nitrocellulose silk to 9.65 per cent if the sample be made by one of the cuprammonium processes. An average of 6-7 per cent extension is more common than either of these extremes, and when this is compared with the extension of wool treated in a similar way the reader will easily realize how unusual this peculiarity is. Under the same conditions a 2/40 worsted yarn will only extend by .5 per cent, or one-half of one per cent, and yet uneven conditioning of wool is known to be a source of serious trouble under certain circumstances. Complete facts are not forthcoming regarding artificial silk, but there can be little doubt that this abnormal effect of moisture must militate against the production of perfect work in the artificial fiber.

In calling attention to the most noticeable properties of artificial silk as compared with silk and wool, nothing has so far been said as to the dimensions of the various fibers. We are all aware of the luster of artificial silk, but it should be borne in mind that smallness of diameter has no direct relation to luster. If we may draw deductions from wool fibers we shall come to the conclusion that the finest fibers show relatively the least luster. Take for example two yarns of the same size, made from fine botany and low crossbred or English wool, the luster of the latter will be infinitely the greater.

What then are the facts of the case? The writer's own investigations entirely support those of Dr. Bowman in stating the diameter of fine Australian merino fibers as being from 1/1500 to 1/2000 of an inch in diameter, and it is very easy to see under a microscope with a micrometer eye-piece that an Italian silk is a little more than half that size. Stated in micrometer degrees, with $\frac{1}{4}$ objective, the figures are for an average of many measurements:

100	quality merino wool	averages	7.5°	or	1/1270	inches.
50	" crossbred "	"	14.0°	"	1/690	"
32	" English "	"	21.0°	"	1/450	"
	Italian silk	"	4.4°	"	1/2200	"
	China "	"	5.3°	"	1/1800	"
200	denier cuprammonia silk	"	14.0°	"	1/680	"
180	" "	"	18.6°	"	1/510	"
200	" viscose	"	21.5°	"	1/440	"
140	" "	"	18.6°	"	1/510	"
135	" nitrocellulose	"	18.6°	"	1/510	"
180	" "	"	21.0°	"	1/450	"

The first thing that attracts attention in this table is the fact that there are differences of quality in the artificial fibers just as there are in real silk. This is only natural, as the size of the hole through which the cellulose solution is forced must have direct bearing on the size of the fiber produced; and the size of these holes may vary. Again the amount of cellulose in the solution or density of the solution will affect the final diameter. If, for example, a solution containing 10 per cent of cellulose is pumped through a hole .01 of an inch in diameter, the sectional area of the hole will be .0001 of an inch and the stream of solution will be that size in area. But that will not be the size of the dry thread. The cellulose being only about one-tenth part of the whole solution the resulting thread will also be about one-tenth the area of the whole. But solutions differ very greatly in density: some contain as low as 5 per cent, some as high as 20 per cent, and it is quite clear that sections of any threads from the same hole will vary in proportion to the amount of cellulose they contain.

No one knows what densities are adopted in various factories and no one must necessarily conclude that different sizes are produced in this way in the same factory. It may be so, that is all that can be said.

The point of importance to the user lies in the fact that all types of artificial silk may be produced in different sizes or qualities and the user must decide which is the most suitable for his own purpose.

The size or diameter of real silk fibers as compared with artificial fiber is the second item of interest in the table. It is 4.4 micrometer degrees or under 1/2000 of an inch, as compared with 14 degrees of the finest artificial silk (a cup-

rammonia) and with 18.7 degrees as the average micro-measurement of all the artificial fibers that I have examined. There are, however, very good China silks that measure 5.3 degrees in diameter so it is perhaps fairer to use 5 degrees or 1/1900 of an inch as the average for silk against 1/510 for artificial. This is not quite four diameters to one.

The point of really practical importance, however, is not the diameter of the fibers but their number in a thread of any given size. The one has of course direct bearing on the other, but the two are not in direct relation. We should expect to find them in exact relation to the square root, if the specific gravity of the material were alike; and their actual dimensions come exceedingly near to those figures. For in a 39 denier China silk there are 31 fibers which means that in a 200 denier of the same material there would be 159 fibers whilst

The fibers in 200 denier cuprammonia silk count 18 in 200 denier.									
"	"	"	180	"	"	"	equal	15½	" " "
"	"	"	135	"	nitrocellulose	"	"	26	" " "
"	"	"	180	"	"	"	"	16	" " "
"	"	"	250	"	viscose	"	"	18½	" " "
"	"	"	140	"	"	"	"	23	" " "
Average,								19½	" " "

This makes the average of all the artificial silks that I have measured contain 19½ fibers in a 200 denier thread, showing that the real silk, which is not a very fine one, contains eight times the number of threads in a given weight.

If the covering power of other fibers is anything to go by, it is clear that silk, with its far more numerous fibers, will spread better in a fabric than will any of the artificial fibers that are at present on the market. This is, of course, only natural, and if the fibers were round it would be easy to make a diagram to represent the relations of the two both as to the number and size of fiber, but the fact is that none of the fibers are round in section. Some are oval, some egg-shaped, and some of very irregular section, and so their size when grouped in thread form will not be calculable by any mathematical formula.

Nevertheless, in the writer's opinion, the size and number of individual fibers in a thread must always have great bear-

ing on its covering power; and the smaller they can be made with regularity and strength the better they will be if they do not lose any of their luster.

The difficulty is that in reducing the size of fibers their luster is almost certain to be reduced as well. It is generally accepted as a fact that the more light is broken up, the less brilliant is the effect. The more fibers there are in a thread of given size, the less is the amount of light reflected from each; and except under unusual circumstances the less also is the total.

In the interests of covering power and suppleness in the yarn it is therefore desirable that the number of fibers should be increased. In the interests of luster the contrary is the case. In all probability as time goes on and greater perfection of process makes possible the production of finer fibers, the manufacturer will be able to select strong lustrous yarns or fine fibered supple threads for different types of fabric.

When all is said and done it is probable that the natural product will take a lot of beating. It is admitted that the best artificial silks are brighter than many real silks at a great deal less money, but, after all, brightness is not everything in clothes. Fibers that give the greatest cover for their weight provide the greatest possible protection and silk in addition to remarkable covering power has wonderful luster and strength as well.

It shows luster in spite of the fact that its individual fibers are so small, and if they were as large in diameter as artificial silk fibers are, there is every reason to suppose they would shine with far greater luster.

The fact is that artificial silk is filling a wonderfully useful place in many kinds of fabric to-day. To what extent its use will grow no one can possibly tell. Nor can any one say how fine will be the fibers that will be artificially produced in the future. One thing is certain, that finer fibers will produce different cloths, and in this age of restless seeking after something new, that in itself will pay. It will indicate greater perfection of production, and if we look for as rapid improvement in the future as has been witnessed in the past, there are great advances in store.

THE SENATE "LOBBY" INVESTIGATION.

AMERICANS ONLY SUMMONED, FOREIGNERS ALMOST EXEMPT
—TESTIMONY AS REGARDS WOOL MANUFACTURING.

SINCE our comment in the June "Bulletin" on President Wilson's charge that an "insidious" lobby was at work against his new tariff bill in Washington, a Senatorial investigation of the charge has been held and completed. Among the many witnesses representing the chief American manufacturing industries who were summoned to appear before the Overman committee in June or July were Mr. William Whitman, formerly President of the National Association of Wool Manufacturers, and Mr. Winthrop L. Marvin, the present Secretary and Treasurer.

The Senatorial committee consisted of Mr. Overman, of North Carolina, Chairman, Mr. Reed, of Missouri, and Mr. Walsh, of Montana, Democrats, and Mr. Cummins, of Iowa, and Mr. Nelson, of Minnesota, Republicans. The Democratic Senators of the committee questioned Mr. Whitman particularly and at great length about circumstances connected with the framing of the Dingley tariff law in 1897, when Dr. S. N. D. North, at that time the Secretary of the Association, was retained as an expert to aid the protectionist majority of the Senate Committee on Finance.

STATEMENT OF MR. WHITMAN.

Inquiry was made of Mr. Whitman as to his interest in the duty on tops in the Dingley law. This gave Mr. Whitman a chance to explain in full detail for the public record his connection with that matter, which had been widely misrepresented for partisan purposes. He showed in reply to the questions of the Democratic Senators that he was not in favor of the duty finally provided, which was as high as the rate on finished manufactures: that he had earnestly and consistently opposed that excessive duty, and that it was written into the law without his knowledge and consent, as representing the wool manufacturers of America. "Those letters

which were published," Mr. Whitman said, "are not the letters which I wrote, but garbled extracts from them, as I am prepared to demonstrate."

Mr. Whitman thereupon insisted that the whole text of the letters which he had addressed to Secretary North and others in 1897 be read and put into the record of the hearings, and he pointed out to the committee how important material had been left out of the letters previously published — material clearly proving that he was desirous of a moderate duty on tops and not of the excessive rate finally established. At one point Mr. Whitman said:

I desire to rise at this point on a question of privilege. I have something more to follow this. This is not only an attempt upon my part to clear my reputation, which has been assailed, but it is an attempt upon my part to furnish to this committee some evidence of a malicious influence upon Congressmen and Senators that, perhaps, can be removed as a protection to them as well as to the community. I listened the day before yesterday with great pleasure and satisfaction to the remarks of Senator Reed and others in reference to the conduct of a man who had personated honorable men belonging to the Senate and to the House of Representatives. I listened with delight to this characterization of the act of that man, and I thought how noble a thing it is for Senators to stand up and defend the reputation of their fellows. I was delighted with it. On the other hand, I think it is equally important for the Members of the House of Representatives and for the Members of the Senate to have an equally high regard for the character of any honorable American citizen, and not allow themselves to be imposed upon by any malicious person, and it is to show that and to help the committee that I ask that the whole letter be read.

As to the part which Secretary North played in assisting the Committee on Finance, Mr. Whitman said:

I believed in Mr. North. I think he did his duty to me and to the rest of us. I believe he was faithful to his trust in the sub-committee of the Finance Committee, and I do not believe there was ever anything done that the most exalted, high-toned man could take the slightest exception to when you get right down to the truth.

A telegram sent from Mr. Whitman's home on July 9, 1897, to Mr. North in Washington explained that Mr. Whitman's physician had forbidden him to go to Washington, where he desired to be as the chairman of the Executive Committee of the National Association of Wool Manufacturers, particularly charged with the presentation of the protectionist argument. On the following day, July 10, 1897, Mr. Whitman wrote to Mr. North as follows:

78 CHAUNCY STREET, BOSTON, July 10, 1897.

MY DEAR MR. NORTH: In case the House bill is adopted, the verbal amendments asked for should be made. I have no time to-day to go over the matter carefully, and do not believe it necessary, as you have all the data. To the best of my recollection, in House bill, page 96, line 11, the words "the duty shall be" should be erased. On line 13 the words "the duty shall be" should be erased. On page 101, line 4, the words "the duty shall be" should be erased.

I again inclose copy of paragraph as substitute for 367. No doubt this is better than the original. It is the one suggested by Deputy Collector Fiske. All that I want you to be sure of in the House bill is the phraseology.

With regard to the Senate bill, our people this morning passed the following vote:

"In view of the information contained in Mr. North's telegram to Mr. Whitman, dated July 9, all things considered, we favor the passage of the House bill, with verbal amendments asked for. If this cannot be secured, the Senate bill, with amendments asked for, will be satisfactory, but these amendments must be insisted upon."

Inclosed is a list of the amendments to the Senate bill asked for. There seems to me to be no reason why they should not be granted, and certainly, if the House bill is not adopted, Mr. Dingley would be of material assistance in securing these amendments. I think you fully understand the matter.

I hope to be able to come in Monday morning, and if you wish to call me up on the telephone, call up either Mr. Whitman or Mr. Hobbs, and if I am not here Mr. Hobbs will know what to do.

Yours, very truly,

WILLIAM WHITMAN.

To S. N. D. NORTH, Esq., Washington, D.C.

P.S. — I am unable to go to Washington and have no one to look out for my interests there but yourself, and I depend upon you. Of course, Messrs. Aldrich and Dingley will do all they can, but I depend upon your letting them know what I need. I depend upon you. Dress goods, yarns, and tops.

Mr. Whitman called the attention of Senators of the committee to the fact that the published articles attacking him contained only the postscript of this letter and not the remainder of it, which showed that he was endeavoring to carry out the instructions of his fellow-manufacturers in his communications to Mr. North — for he was acting for them, acting in a representative capacity, and not merely speaking for himself, for the Arlington Mills. In other letters introduced and made a part of the record Mr. Whitman showed that the same thing had been done — that only a part of the letters were published by those who were attacking him, and that the passages which were suppressed emphasized the fact that he was seeking a lower duty on tops, or that he was writing or speaking in a representative capacity, as the chairman of the committee of the manufacturers.

STATEMENT OF THE SECRETARY.

Mr. Marvin was asked at first about the revenues and expenditures of the National Association of Wool Manufacturers. He gave a general statement in answer, and at the desire of the committee sent for the account books of the Association in Boston, so that a summarized analysis of the regular receipts and expenditures for several years could be made. In reply to the inquiry of the committee as to his own activity in Washington while the Simmons-Underwood tariff bill was pending before the Senate, Mr. Marvin said:

I came to Washington on the 7th of April last at the desire of the officers of the National Association of Wool Manufacturers, to present briefs on behalf of the Association and the American wool manufacture before the Senate Committee on Finance. On May 9, when the tariff bill had passed the House and reached the Senate, I addressed to the members of the Finance Committee a formal remonstrance against the bill — a brief formal remonstrance.

After the membership of the sub-committee on the woolen schedule was indicated, I called on Chairman Simmons, of the Committee on Finance; on Senator Stone, who was to be the chairman of the sub-committee; on Senator Jones, of Kentucky; and on Senator Thomas, of Colorado, introduced myself to those gentlemen as the Secretary and Treasurer of the National Association of Wool Manufacturers, and asked the privilege of an interview, understanding well that no formal hearings would be given, but that interviews were to be granted to persons who had something definite to say.

I secured the promise of such an interview for myself, prepared the statements I wished to make before the sub-committee, appeared before the sub-committee on the 21st of May, presented two written briefs, supported them in verbal statements, and asked that the committee hear, on the 23d of May, Mr. Julius Forstmann, of Passaic, N.J., and Mr. William Whitman, of Boston, Mass.

Mr. Forstmann was a member of the German tariff commission some years ago. He is of a family that has carried on the wool manufacture in Germany for several hundred years. He is an accomplished manufacturer himself, now an American citizen, and the head of an important wool manufacturing concern in Passaic, N.J. I believed that his very unusual experience on both sides of the Atlantic Ocean would be valuable to the sub-committee, and to the whole Committee on Finance. I asked a hearing for Mr. Whitman at his request. Of course, he needs no introduction to you.

I appeared with those gentlemen on the 23d of May, before the sub-committee, making only a brief verbal statement myself. Subsequently, because of questions that were put to me on those two days before the sub-committee, I prepared and presented to the sub-committee, and afterwards to the whole Committee on Finance, certain other briefs and arguments on behalf of the American wool manufacture. My presentation of the case for the industry before the Senate sub-committee was made as carefully as I would make the presentation of a case before the Supreme Court of the United States,—with as much care and as much conscientiousness.

After I had presented my briefs before the members of the Senate sub-committee, I saw no members of the tribunal whatsoever, and had no further communication with them, and have had no further communication with them to the present time.

Besides my appearance, in a formal way, before this

Senate sub-committee, I called on Senator Johnson, of Maine, the two Senators from New Hampshire, the two Senators from Massachusetts, Senator Penrose, of Pennsylvania, former chairman of the Committee on Finance, and Senators Smoot and Warren, with whom I had a personal acquaintance, growing out of the large interest of the Rocky Mountain States in the wool manufacture, through the fact, with which you are familiar, that the Rocky Mountain States are the great producers of American wool, which makes up the bulk of the raw material of the American industry.

The CHAIRMAN (Senator Overman).—Is that the extent of your activity?

Mr. MARVIN.—That is the extent.

The CHAIRMAN.—Did you have any headquarters in Washington?

Mr. MARVIN.—I had no headquarters in Washington. I have lived at the New Willard Hotel, as has been my custom.

The CHAIRMAN.—Have any of the members of your Association been here?

Mr. MARVIN.—I recall none, except Mr. Forstmann and Mr. Whitman, whom I have already named.

The CHAIRMAN.—What is the extent of your publicity campaign?

Mr. MARVIN.—We had no publicity campaign whatever. I issued no circulars: I issued no pamphlets. All those I consider perfectly justifiable, so long as they are true or honest. But we have issued none whatever. The only communications I have had with members of Congress here have been formal briefs, copies of which I have here, and copies of which I will be glad to put in the record if you desire.

Senator WALSH.—How long have you been Secretary of the Association?

Mr. MARVIN.—I was elected in February, 1909, and for a few months before that served as acting Secretary of the Association because of the illness of Mr. McPherson at that time.

After an explanation from the Senators of the sub-committee of what they desired in the way of a summarized account of receipts and expenditures, the hearing was continued as follows:

Senator WALSH (Dem.).—What sort of opposition have

you encountered in this effort you have been making to maintain higher duties on wool and woolen goods?

MR. MARVIN. — We have not sought, in any time, for any higher duties on wool and woolen goods.

SENATOR WALSH. — You are asking for higher duties than those provided by the Underwood bill, are you not?

MR. MARVIN. — We are asking for higher rates than those provided by the Underwood bill, because the Underwood bill is confessedly a bill for revenue only; a bill which, as the author says, gives no heed to protection.

SENATOR WALSH. — Whatever effort you have been making here has been with a view to securing a higher rate upon the dutiable articles generally?

MR. MARVIN. — Before the House Committee on Ways and Means we submitted a schedule of the rates of duty which we believed to be absolutely necessary to maintain the industry in the United States.

SENATOR WALSH. — I understand. That is, higher than the rates provided in the Underwood bill?

MR. MARVIN. — Those rates averaged from 51 to 59 per cent, as against 35 per cent as carried in the bill as it now stands.

SENATOR WALSH. — What I want to know is what forces and influences you found at work here to endeavor to have retained the duties as fixed by the Underwood bill.

MR. MARVIN. — The influence of the importers of New York and Chicago, representing the British, French, and German manufacturers. They are our rivals and enemies, always and constantly.

SENATOR WALSH. — And whom did you find here engaged in that work?

MR. MARVIN. — I have met no representatives of these foreign manufacturers here. I think in all probability they would keep a long way away from me. I do not think they would like to face me before a committee of Congress. The foreign manufacturers have appeared before Congress in briefs and arguments addressed to the committees of Congress insisting on lower rates.

SENATOR WALSH. — But you are here representing the National Wool Manufacturers' Association?

MR. MARVIN. — Yes, sir.

SENATOR WALSH. — And Mr. Forstmann is here and Mr. Whitman is here, and I assume that you are all acting with a common purpose, which is to get duties raised to average

of something over 50 per cent, as you say, instead of 35 per cent?

Mr. MARVIN. — Yes, sir.

Senator WALSH. — What I wanted to know was whom you have encountered here, who is working against you to maintain duties at the lower rate.

Mr. MARVIN. — We have encountered nobody in person, but we have had the usual experience as to the foreign manufacturers, and that is that they have been afraid to appear before a committee of the American Congress and ask for a measure that will benefit them at the expense of their American competitors.

Senator WALSH. — You did not find them here at all?

Mr. MARVIN. — So far as I know, they have never dared to appear before a committee. They have sent their briefs here —

Senator WALSH. — Whether they dared or not, they were not here?

Mr. MARVIN. — They were not here, so far as I know.

Senator WALSH. — Now, as to the briefs, take the woolen schedule. Who did actually file any brief for the maintenance of the duties as they were, or in favor of lower duties?

Mr. MARVIN. — I could go over the hearings and give you the names of the importers who filed briefs. I could not give you the names offhand.

Senator WALSH. — They did not impress themselves upon you sufficiently so that you can give us the names of any such people?

Mr. MARVIN. — I cannot give you the names without looking them up. Of course whether they appeared personally before individual members of the committee, I do not know.

Senator WALSH. — I suppose, of course, you recognize that there is a third party deeply interested in this, namely, the public?

Mr. MARVIN. — I certainly do, Senator, and the majority of the public are on our side.

Senator WALSH. — Well, of course, that is a matter for dispute.

Mr. MARVIN. — Not for dispute —

Senator WALSH. — But the private interests concerned are on one side the wool manufacturers, and the other side the importers.

Mr. MARVIN. — I should put it, on one side the British

and French and German manufacturers and importing houses, and on the other side the American manufacturers and the American people, the majority of whom at the late Presidential election declared, when they voted for the Republican or Progressive candidates, for a protective tariff.

Senator WALSH. — Let us assume that —

Mr. MARVIN. — It is the fact.

Senator WALSH. — Do you know anybody who has been here representing that small minority who are opposed to that policy?

Mr. MARVIN. — The importers are opposed to the rates that we ask.

Senator WALSH. — I was simply trying to find out who the lobbyists were on the other side.

Mr. MARVIN. — So far as I know there are no lobbyists here on either side. A lobbyist, as I interpret the word, means a person who is engaged in endeavoring to influence legislation by corrupt or improper methods.

Senator WALSH. — I do not give the word that meaning.

Mr. MARVIN. — That is the way I interpret it. If a man describes me as a lobbyist I put him down as my enemy.

Senator WALSH. — I do not understand the word to have that meaning. I did not mean to use it in any offensive sense at all.

Mr. MARVIN. — I understand so.

Senator WALSH. — I want to inquire further as to what your business is.

Mr. MARVIN. — My business is that of Secretary and Treasurer of the National Association of Wool Manufacturers.

Senator WALSH. — What business did you follow before you became Secretary and Treasurer of the Association?

Mr. MARVIN. — I was a journalist in Boston. As I stated the other day, for a number of years I was associate editor and chief editorial writer of the "Boston Journal," which was long the leading protectionist newspaper of New England. That has always been my profession — I have always been a writer.

A SIGNIFICANT CONTRAST.

No suggestion was made by any Senator at any time during the hearings that there was any doubt as to the methods that had been followed during the presentation of the case for the American woolen industry against the pending Democratic tariff proposal. But it is significant that the Senato-

rial committee, a majority being Democratic, had one method of procedure for those who represented American, and another for those who represented foreign, or hostile, interests. As has already been said, the Treasurer of the National Association of Wool Manufacturers was asked to send for his books and present to the committee for the public record a statement of the receipts and expenditures of the Association, not only for the present year but for the years as far back as 1895. This request of the Democratic Senators of the committee was promptly and courteously complied with, though the information asked for had not hitherto been published anywhere.

But—to show the contrast in method and in spirit—on July 8th, a few days before, F. J. Goertner, representing importers and manufacturers of European plate glass, was a witness before the committee—one of the very few witnesses summoned on the side of alien interests hostile to the protective tariff and to American manufacturing.

In reply to questions of Senator Nelson, of the Republican minority of the committee, Mr. Goertner admitted that in his fight against the Aldrich-Payne tariff in 1909 he solicited and received amounts of money from European manufacturers as well as from importers living in this country. This colloquy ensued:

Senator NELSON.—What proportion of the money you received came from foreigners and what proportion from our own people?

Mr. GOERTNER.—I cannot say regarding 1909. I should say, Senator, two-thirds and one-third, but that is merely a guess.

Senator NELSON.—I do not exactly understand your answer.

Mr. GOERTNER.—Perhaps two-thirds from people abroad and one-third from people at home; but that is merely a guess. I have no accurate knowledge.

Senator NELSON.—Two-thirds from people abroad and one-third from our own people?

Mr. GOERTNER.—Yes. . . .

Senator NELSON.—Who was instrumental in getting the funds? Did you write to them and ask them to contribute?

Mr. GOERTNER. — No, sir. We maintain a foreign office in Charleroi, Belgium. It was all handled through that office. . . .

Senator NELSON. — How much money did you or your firm spend — I do not mean your own money — but altogether — in that campaign on the tariff bill of 1909, what is called the Aldrich-Payne bill?

Mr. GOERTNER. — My recollection is, about \$10,000 or \$11,000 altogether. . . .

Senator NELSON. — That is the total amount you spent, but how much have you raised?

Mr. GOERTNER. — That I cannot say. I can get the details, if you insist on it, but I hope you will not.

Senator NELSON. — We would like to know. We have got that information in these other cases, in regard to sugar, etc.

This information as to receipts and expenditures, which was demanded and received from the Americans of the National Association of Wool Manufacturers, was not insisted on from Mr. Goertner, representing the European manufacturers and importers who raised \$10,000 or \$11,000 to fight the protection given to the American plate glass industry in the protective tariff law of the United States. Apparently the subject did not at all interest the Democratic majority of the committee, which was so eager to have all the facts from the American side. The episode briefly described here is not characterized in these pages; it is of itself sufficiently eloquent of the spirit in which the so-called "lobby" investigation was initiated by President Wilson and conducted by the Senators of his political party in Washington.

THE MOTIVE OF THE "LOBBY" CRY.

The charge against American manufacturers and those who represented them was one of "lobbying." But with the exception of Mr. Goertner, few or no representatives of European manufacturers or importers were summoned before the Democratic tribunal. When President Wilson made his charge that an "insidious" lobby was at work in Washington against the Simmons-Underwood tariff for revenue only,

a great many American business men were in the city, armed with facts and figures, to protest against what they believed with all their hearts to be a grave discrimination and injustice involved in excessive reductions in rates of duty of a kind unheard of since the years before the Civil War, when the non-manufacturing, agricultural South dominated the national government.

It is a fair guess that President Wilson and his lieutenants feared this informed, earnest, well-nigh unanimous protest of American business men, and desired by a political stroke to frighten these men away from Washington. Therefore, they were one and all of them accused by the President of the United States of being "insidious" lobbyists. The President's attack undoubtedly succeeded so far as the great majority of these men of business were concerned. It was a matter of common remark that they did leave Washington. They left it with their exact knowledge born of their practical experience — with all their precise information that would have been of so much value to the legislators charged with the making of a tariff law. Undoubtedly there will be found to be many errors and imperfections in the schedules of the Simmons-Underwood law which might have been avoided if its authors had had a fairer chance to receive the suggestions and to consider the protests of these American business men, whom President Wilson, with his violent accusation of "insidious" lobbying, drove away from the capital of their country at a time when their knowledge was needed.

It may be said right here that no representative of the National Association of Wool Manufacturers was frightened away from Washington by any partisan accusation or threat; that every brief or argument on behalf of the Association and the woolen industry that needed to be presented was duly presented before as well as after the "lobby" investigating committee began its work; that whenever a personal interview seemed to be advisable it was sought and in every instance courteously granted by the Democratic Senators of the Committee on Finance, and that the case for the National Association and the American wool manufacture was as fully

and conscientiously laid before the Senate as it had been laid before the House of Representatives — as fully as if President Wilson had never said a word about “lobbying,” “insidious” or otherwise.

THE PRESIDENT AS A “LOBBYIST.”

That President Wilson himself should bring this charge of “insidious” “lobbying” against business men caused at the time a great deal of quiet laughter in Washington. For it has been a matter of common remark since this present Administration began that Mr. Wilson himself was the most “insidious” and persistent lobbyist who had ever appeared at the national capital. Not content with sending messages to Congress, he himself at once formed a habit of going direct to Congress and soliciting the support of Senators and Representatives by personal appeal. Indeed his methods in this direction are so well-known, so unconcealed, so insistent and aggressive that a distinguished ex-Senator of the United States, a Democrat, the Hon. T. M. Patterson, of Colorado, has lately said of them in a leading Democratic newspaper, the “Denver Rocky Mountain News”:

And while President Wilson is hurling denunciation at the Washington lobbyists, good and bad alike, maybe his keen intellectual personality will not be ruffled if the question of a real and convincing sort of lobby is given a brief attention. It is not, perhaps, too much to say that the most effective lobby in Washington at this time is the President and his Cabinet. Not that it is in anywise suggested that those distinguished gentlemen would engage in an unworthy scheme, but it has not escaped observation that no paid lobby, however important or expensive to its masters, can wield the same power as a wise dispensation of Federal patronage.

One of the Western Democratic Senators whose vote for the Administration tariff bill, and especially for free wool and free sugar, was long in serious doubt, was Mr. Walsh, of Montana — the same gentleman who served as a member of the “lobby” investigation committee of the Senate. One of the most painstaking and accomplished of the corps of

Washington correspondents, Mr. William E. Brigham, thus relates in the "Boston Transcript" how the conversion of Mr. Walsh was brought about:

Speaking of insidious lobbies, some of the details of the Administration's fine work in that line are coming to light. A President may have employed heavier pressure than Mr. Wilson has in getting his tariff bill into conference, but the record does not show it. One of the mysteries of the session has been the spectacle of obedient and often distinguished senators stepping humbly into line for the tariff bill, but the story of what made them jump when the White House pulled the string has remained a secret. Gradually the facts are coming out. This correspondence suggested sometime ago that the great reclamation service of the country was diverted from its original usage for the purpose of driving at least one recalcitrant senator into line. This was Senator Walsh, of Montana; and the story of the coup is now becoming common property.

Senator Walsh took his seat on March 4 and came here as an opponent of free wool and free sugar. He was elected at the State primary by only six thousand majority over Senator Dixon, the Bull Moose candidate, while the regular Republican nominee polled more than 18,000 votes. That the primary was hotly contested is admitted; and it is known that during the campaign Senator Walsh practically told the farmers of the State that he would oppose placing wool and sugar on the free list and those industries are strong in the Mountain State. While he did not make them a distinct pledge he did tell them that in no section of the State did he find any sentiment in favor of placing those articles on the free list, and that if he was sent to Washington he would go there to represent the people of Montana, the farmers as well as the rest.

EVERY DEMOCRATIC VOTE NEEDED.

But when the Senate met in extra session to take up the tariff it was found that every Democratic vote would be needed to put the free trade measure through, carrying with it free sugar and free wool. President Wilson, who has proved himself to be as expert a wire-puller as his Democratic predecessor, Grover Cleveland, looked around to find weak-kneed Democrats who could be induced or compelled to vote as he desired. His eye fell on the big-moustached

little man from Montana, and at the same time he found a club that he believed could be used effectively on Senator Walsh. This was the reclamation question. The Government had two large projects under way in Montana designed to irrigate practically a million acres of land. One was the Sun River project, which would make available 276,000 acres of arable land and would cost the Government about \$4,000,000. Hundreds of Senator Walsh's friends would be benefited if this project was pushed to a speedy completion. By buying this land from the Government at \$4 per acre and paying \$36 per acre in twelve payments for water they could not only turn barren land into fruitful farms but could locate town sites and reap immense profits from incoming actual settlers as well as business men. In the town-site end of the game there was immense opportunity for making money fast. Land at \$40 per acre turned into town sites with lots ranging from \$200 upwards means to coin money. And these Democratic friends and supporters of Senator Walsh expected him to expedite matters now that there was a Democratic Administration in Washington, etc.

HOLDING UP RECLAMATION.

It was therefore decided, by some authority within the Administration, to stop work on this project and thus bring a pressure to bear upon Senator Walsh to get into line for the Administration tariff bill, free sugar, free wool and all. In consequence of this plan, the word went out to Montana that work on the project would be stopped and the proposed extensions not be considered for the present. Consternation ensued in Montana and especially among those who expected to be benefited by the completion of this project. Public meetings were held in Great Falls, Mont., to protest and the "Great Falls Tribune" in May contained many articles protesting against the stoppage of the work.

As a result of the agitation, a strong committee, headed by Governor Stewart, ex-Governor Norris and others, took the first train to Washington to file their protest against the stoppage of this work. Arriving here, they were given a hearing by Secretary Lane of the Interior Department and later on by President Wilson. While the Administration did not divulge the ulterior object in view, the members of the delegation were put off with the promise that Secretary Lane desired to investigate the project personally in Montana, as he had been told that the people of Montana were too poor to pay the \$36 in twelve years charged by the Gov-

ernment for water. Governor Stewart and the others were told that they must wait, etc. Meanwhile the word was slipped around quietly that the attitude of Senator Walsh on the tariff bill was not at all pleasing to the Administration, and that if he would only vote as desired the project would be pushed to completion.

WHY WALSH WAS BOMBARDED.

The hint was sufficient and the Montana delegation returned home and proceeded to bombard Senator Walsh with demands that he get in right on the tariff bill. Each day the pressure became greater and the little man from Montana passed many sleepless nights. He did not want to vote for free sugar or free wool, but he did want that Sun River project completed. Not fully realizing the danger that the senator was in, the beet sugar and wool men in Montana relied on him to vote right and did but little to counteract the work of the Administration. The pressure increased and finally Senator Walsh yielded and announced that he would support the tariff bill as desired.

But President Wilson was too chary to be caught by only a promise. He demanded the goods that he had bargained for, and consequently work on the project was still delayed. After Senator Walsh had voted right, then he would get his reward, and not before. The pressure upon the senator continued right up to the time the vote was taken and the strain was such that it was reported at the capitol on the day the vote was taken that the senator gave way and had a fainting spell.

QUICK RESULTS FOLLOW VOTE.

But Senator Walsh voted as demanded by the Administration — and hardly was it known at the Interior Department that he had done so when Secretary Lane issued an order directing that the Sun River project be at once expedited and the desired extensions as well.

It is significant that the "Great Falls Tribune" the following day not only featured the despatch from Washington telling of the passage through the Senate of the tariff bill, but that on the same page it published several columns rejoicing over the fact that Secretary Lane had ordered resumption of the work on the Sun River project. The latter articles contained a telegram from Senator Walsh announcing the order. The fact that so much space was

given to the reclamation project indicates that it was designed to distract attention from the senator's vote in favor of free wool and free sugar.

There are rumors that this same great reclamation work was also utilized in both Nevada to force Senator Newlands into line and in Arizona to keep Senators Smith and Ashurst in line. It is known that work on one of the projects in Arizona also was suspended about the same time. All three of these senators voted as the Administration desired, despite the fact that there are thousands of Democratic farmers in both Nevada and Arizona who will be injured by either free wool or free sugar. Senator Walsh, as a member of the Overman Lobby Investigating Committee, has been a leading questioner, but he has not been a recent witness.

The political methods, as cleverly outlined above, appear to show that in President Wilson's judgment it is wholly fair and even praiseworthy not only to "lobby" but to invoke the power of public patronage, and even to divert the course of important public work, in order to win votes for free trade or for tariff for revenue only, but that it is reprehensible for business men or their representatives to address Congress or to appeal to their own Senators against it. A public man who does not know how to be tolerant of the views of his political opponents is gravely handicapped for success as President of the United States.

Editorial and Industrial Miscellany.

A DEFERRED SCHEDULE K.

FREE WOOL DECEMBER 1 AND REDUCED GOODS DUTIES JANUARY 1, THE SENATE PROGRAM AGREED TO BY THE HOUSE CONFEREES.

So far as the woolen manufacture is concerned, the new Simmons-Underwood tariff law will not be in partial effect until December 1, 1913, and not in full effect until January 1, 1914. This is a recognition by the tariff-makers of the fact that the woolen industry is more vitally affected than any other manufacturing industry by the new law in that relatively high duties are to be wholly removed from the raw material. But Congress has not done as it did in 1894, when free wool became immediately effective on the passage of the Gorman-Wilson law on August 27, and the reduced duties on manufactures of wool were not made operative until January 1, 1895.

This interval of four months was granted by Chairman Wilson and his colleagues at that time in order to assist the industry to adjust itself to the new conditions — to give the mills a sufficient time in which to manufacture fabrics out of the free and lower-priced materials.

But though Chairman Underwood was strongly urged to follow this illustrious example he was unwilling to do so, having convinced himself that immediate effect for free wool as well as for the reduced goods duties was best for all concerned. The House bill, therefore, provided that free wool and the new goods rates should become operative, with nearly all of the other duties of the new measure, on the day after the final approval of the bill. The Senate, however, with Rocky Mountain wool-growing Democratic statesmen to placate, would not consent to immediate free wool, and, deferring this, compelled a postponement of the new goods duties also.

In response to what seemed clearly to be the wish of a majority of the mills, the National Association asked Chairman Underwood to allow a period of six months between free wool and the

reduction of the duties on manufactured products. The same request was made to the Senate Committee on Finance. But when it became manifest that no such interval could be had, a feeling developed among many mills that it would be better to have the new arrangement made immediately effective. It was generally believed until just before the Conference Committee agreed on its report that Chairman Underwood and the House conferees would prevail, and that the Senate plan for free wool December 1 and the reduced duties on goods January 1 would be abandoned. However, in the final adjustment this did not turn out to be the case. Chairman Simmons won on this point and not Chairman Underwood. Therefore, so far as Schedule K is concerned, the new law, though the law of the land, is still a matter of the future.

The reduced duty of 15 per cent on the hair of the Angora goat and the alpaca, being included in Schedule K, does not go into effect until January 1, 1914, the same day on which the reduced duties apply also to manufactures of mohair and alpaca. This is a grave injustice to the makers of these commodities — an injustice against which the Association protested in Washington. The interval of one month left to the woolen manufacturers between free wool and the reduced goods duties is of very little avail, but no interval at all is given to the mohair and alpaca manufacturers.

The greed of the goat-owners of Texas, so potent in the councils of the majority party in Congress, has in this matter overreached itself, for these Texans have only one possible market, and that is the American mills. If any injury is done to those mills by such reckless legislation as this, it will inevitably rebound upon the goat-herders of the South and Southwest. And alpaca not produced in this country should have been beyond question duty free when wool was made free. A sinister spirit of sectionalism characterizes the mohair and alpaca paragraphs of the new tariff law. It was believed until the very end of the work of the Conference Committee that the Senate would succeed in keeping the hair of the Angora goat and the alpaca on the free list.

AN HONOR FOR MR. HOBBS.

DEGREE OF MASTER OF SCIENCE CONFERRED BY DARTMOUTH COLLEGE ON THE PRESIDENT OF THE ARLINGTON MILLS.

At the one hundred and forty-fourth commencement exercises of Dartmouth College, held at Hanover, N.H., on June 25, 1913, the honorary degree of Master of Science was bestowed upon Mr. Franklin Warren Hobbs, of Boston, the president of the Arlington Mills and an influential member of the National Association of Wool Manufacturers, in which he has long served as a member of the Executive and Advisory Committees.

The degree was bestowed upon Mr. Hobbs as a textile manufacturer. He is a graduate of the Massachusetts Institute of Technology, and having been first the assistant treasurer and then the treasurer of the Arlington Mills was elected to the presidency last winter, when the post was relinquished by Mr. William Whitman.

This recognition of Mr. Hobbs by the old and famous New Hampshire institution of learning—one of the really great colleges of the country—is a notable compliment to the textile industry of America.

Professor John King Lord, in presenting Mr. Hobbs to the President of Dartmouth, said: "Mr. President: I present to you for the honorary degree of Master of Science a graduate of the Massachusetts Institute of Technology, who has made his training effective in many lines—Franklin Warren Hobbs." President Ernest Fox Nichols then addressed Mr. Hobbs as follows: "Franklin Warren Hobbs, whose broad technical training has borne fruit in the successful solution of many intricate problems connected with our great textile industries, and whose labors have won the highest distinction, I admit you to the degree of Master of Science."

As the words "Master of Science" were spoken, Professors Burton and Husband put the master's hood on Mr. Hobbs, and then the President handed him the parchment degree.

It cannot but be gratifying to all friends of Mr. Hobbs and to American textile manufacturers generally to feel that a college like Dartmouth had in this way recognized the importance of the textile industries to the community. In this connection it is interesting to recall the fact that Mr. Hobbs is a great-grandson of Abraham Marland, one of the pioneer wool manu-

facturers of America, who, one hundred years ago, began the production of flannels and blankets at North Andover, Mass. That early mill of Mr. Marland consumed in the year 1825, 34,000 pounds of wool, and in the year 1827, 51,000 pounds. As an illustration of the growth of the woollen industry it may be remarked that the Arlington Mills, of which Mr. Hobbs is the head, could now comb in five hours the quantity of wool which it took his great-grandfather one year to manufacture. The worsted branch of the woollen industry in America had its birth in 1845 at Ballard Vale, in the mill of Mr. John Marland, son of Abraham Marland, whose first goods were an imitation of the French muslin delaines, with a cotton instead of a worsted warp.

Mr. Hobbs is not only a conspicuous manufacturer, but he has borne a highly honorable part in advancing the welfare of general and textile education. He was one of the original trustees of the Lowell Textile School, and shortly after its incorporation was appointed by Governor Crane as one of the State trustees, and has since been reappointed every four years. Mr. Hobbs has also been a member of the school committee in Brookline for eleven years, and for the last eight years has been the chairman of the board. Brookline is distinguished among the communities in the neighborhood of Boston, all of them with schools of far more than ordinary worth, for the peculiar excellence of its methods of popular education.

Mr. Hobbs has received from fellow-manufacturers the heartiest congratulations on the honor that has come to him.

SIR SWIRE SMITH.

A REMARKABLE HONOR TO A GREAT ENGLISH MANUFACTURER AND EDUCATOR.

THE Keighley Municipal Hall, Keighley, Yorkshire, England, was recently the scene of a remarkable gathering of notable men and women, who came together to do honor to a distinguished townsman, Sir Swire Smith — a man well known in the United States as well as in his native England as an able business man, a public spirited and an honorable gentleman, genial, kind-hearted and one ever ready to lend a hand in every good undertaking. For many years he has been especially interested in the cause of



Portrait of Ernest Smith

technical education, and the immediate occasion of the gathering was a public presentation to him of his portrait and a scholarship in his honor in the Keighley Mechanics' Institute, the funds for both having been provided by a subscription among his many friends.

Because Sir Swire Smith is well known in the textile trade in the United States and particularly to the readers of this Bulletin, it has seemed proper that more than a passing notice should be made of this interesting event. The record of the meeting is, therefore, largely reproduced in these pages where it will have a permanent form. A half-tone reproduction of the portrait by Mr. Solomon, the artist, is also given. Those who have never had the pleasure of meeting him may be assured that the picture is a good likeness of the man.

THE MEETING AT KEIGHLEY.

Amid scenes of enthusiasm that were in themselves evidences, however intangible and transient, of a lasting popularity and respect, Sir Swire Smith was presented at the Keighley Municipal Hall on Tuesday, April 1st, with the portrait and album subscribed for in recognition of his invaluable services in the cause of technical education. The oil painting and the illuminated album, with the scholarship accompanying them; the reception accorded him by the crowded audience; the terms of praise and honor in which he was addressed by men whose names are familiar as household words; and the long list of those who counted it a pleasure to share in the presentation; must all have brought home to the mind of the recipient the knowledge that his work has won for him a widespread esteem and a fame that has traveled far beyond the confines of his native land into the distant places of the world, and to the lonely outposts of civilization.

In August, 1912, a committee was constituted to make arrangements for a public recognition of Sir Swire's indefatigable labors in the direction of education, and in a comparatively short time there has been subscribed a sum of money sufficiently large to enable the committee not only to make provision for the presentation of the portrait, but also to found a scholarship, by means of which Sir Swire's long connection with the Keighley Trade and Grammar School might be perpetuated. It was further decided to present Sir Swire with an album containing a suitable address and the names of the committee and subscribers, and as this has been made entirely in the Keighley School of Art it will have a special interest for one in whose thoughts that institution has long held a prominent place.

A DISTINGUISHED GATHERING.

The chair was occupied by Mr. John Clough and amongst those on the platform, in addition to the chairman and Sir Swire Smith, were Sir William Mather, P.C., the Mayor of Bradford Mr. W. A. Brigg, and many others.

The Chairman, who was accorded a very hearty reception on rising to speak, said he had had fifty years of friendship with Sir Swire Smith and fifty years' experience of his educational efforts, and he would wish to deal more particularly with Sir Swire's connection with local educational affairs—a connection which dated from the beginning of his interest in the School of Art. That school prospered, and eventually better premises were required, and the present Institute was erected. The fact that the work of the Institute had taken so good a course was largely due, he believed, to the inspiration of Sir Swire Smith; and it was he, too, who infused with enthusiasm many of his friends who took up the question of both elementary and technical education. Sir Swire persuaded several of his townsmen to visit the schools of Germany and the Continent, and it might be said that from that visit the educational progress of Keighley could be dated. That visit and the knowledge obtained abroad had a great deal to do with the erection of the first Board School built in Keighley—that at Holycroft—which was entirely a “class-room” school. It was with difficulty that they managed to have the plans passed by the Education Department, for Keighley was in advance of the department and had to educate it up to the standard at which the town was aiming. What was now the Trade School was proposed by Sir Swire. The Chairman mentioned the fact that the setting up of the Trade School in Keighley was also the means of setting up, by the Endowed Schools Commissioners, the Girls' Grammar School. Sir Swire, like many of his countrymen, had made great sacrifices for elementary and technical education, and was often at work until midnight on the public work for which he had made himself responsible. There was not, he believed, any country which had had so much good voluntary work done for it as had England, and he did not know of anyone who had done so much in that way as Sir Swire Smith.

THE SUBSCRIBERS' ENTHUSIASM.

Mr. J. J. Brigg in an opening statement explained that the idea of recognizing Sir Swire Smith's many years of public duty must have been in the minds of many of his friends, but it crystallized last summer when Mr. Augustus Spencer, Principal of the Royal College of Art, invited him (Mr. Brigg) to join Mr. Sam Clough—then Mayor of Keighley—as honorary secretary and treasurer of a fund for presenting Sir Swire with his portrait. A committee was formed, a circular was drawn up and

sent out, and the money began to come in from friends of Sir Swire all over the world. Special mention was made of the Students' Committee organized by Mr. T. P. Watson and Mr. T. C. Butterfield, with the assistance of past and present students of the school. The result of these efforts had been more than gratifying. They had not had to beg; they had merely to mention the fact, and they had received a sum of about £1,123. The Committee had commissioned the painting by Mr. Solomon, R.A. In addition they had received a sum which, when invested, would produce at least £25 per year. With that it was proposed to establish a Sir Swire Smith scholarship for the Schools of Science and Art. The most satisfactory part of it was that to their twenty-five talents the Board of Education would add another twenty-five, and there would thus be a scholarship of £50 a year similar to the Devonshire and Carnegie scholarships.

THE ADDRESS.

Mr. Brigg then read the address as follows :

To Sir Swire Smith, Knight, J.P., LL.D., etc. :

DEAR SIR: The portrait presented to you to-day and the scholarship which will bear your name are the gifts of friends in many lands, among whom are many students and teachers whose careers you have assisted in numberless ways. These gifts express our appreciation of your services not only as a supporter but as a pioneer of technical education.

More than forty years ago you brought back word of the great advances made by other nations in industrial training, and with a group of friends you organized, in face of much apathy, a school of secondary and technical education in your native town, which was one of the first of its kind in England.

In 1881 you were appointed a member of the Royal Commission to inquire into the progress of Technical Instruction abroad, and you had a large share in the preparation of its report, the forerunner of that activity on the part of the State and of local authorities which has done much to put this country on a level with even its keenest rivals. You have ever been a missionary for this branch of education, and there are few parts of Great Britain where you have not advocated its claims. On the Royal Commission for dealing with International Exhibitions you have acted as vice-chairman.

In recognition of your services, your Sovereign has conferred on you the honor of Knighthood; you have been elected on the Court of the Worshipful Company of Clothworkers, while from the University of Leeds you have received the degree of Doctor of Laws *honoris causa*. The Vice-Chancellor, in presenting you, spoke of you as "a veteran in public service but perennially young in vigor of purpose and in sympathy with new ideas."

This happy union of public spirit with personal enthusiasm has endeared you to more than one generation of friends, and we, whose names are written beneath, regard it as our happy privilege to subscribe to these tokens of our high regard and affection.

SIR SWIRE AS A BENEFACTOR.

Mr. S. O. Buckmaster, in asking Sir William Mather to unveil the portrait, said that to his mind the greatest benefactor to the State was the man who caused two ideas to grow where only one grew before. All of them knew that life was nothing but a constant struggle with the forces of environment and nature; and life, as Mr. Huxley once well expressed it, was a game that was played with an adversary who was absolutely just but absolutely pitiless, and who would never hesitate to take advantage of any lapse or ignorance of the rules of the game. Men like Sir Swire Smith were trying to increase the opportunities for knowing what those rules were and of enabling people to play the game with success. To-day we were all educationists. It was easy, now that the victory had been won, to accept the work by which the victory was accomplished. He could remember the time when learning was looked upon as a dangerous thing, which, if it was to be distributed at all, must be given out in homœopathic doses. It was men like Sir Swire Smith who broke down that foolish and evil belief. These men realized that the thing to aim at was to give all men the means of entering into a fuller, more spacious, and freer life; and they recognized that while knowledge for the few meant despotism, knowledge for the many meant liberty, and well ordered and disciplined liberty meant for the man as for the nation wisdom and power. He had only to mention such names among those in that album as those of the Prime Minister, Mr. Carnegie, Mr. Philip Snowden, and Mr. Will Crooks to show that the area from which there had been gathered the humble expression of goodwill, which they desired to offer, was as wide as the area of the kingdom.

PRESENTING THE PICTURE.

Sir William Mather then unveiled the portrait, and formally asked Sir Swire's acceptance of the picture and the album. In so doing he referred to the distinction which he felt was conferred upon him by the relationship with Sir Swire in which he stood that evening. Sir Swire had gained the reputation of being one of the most public-spirited, and one of the most usefully public-spirited, men that England possessed. He had worked with an unbounded faith in the perfectibility of human nature and with an unbounded enthusiasm, and the portrait which was now before them was a likeness that spoke with no uncertain voice of qualities which had endeared him to them all and made him the

friend of many men of light and leading all over the world. Sir Swire had spent forty years in preparing the way for future generations, and of the Royal Commission with which his name was so closely associated he was one of the most earnest, devoted, and self-sacrificing members. The report of that Commission was in some respects very unsatisfactory reading. In the report Britain took a back seat, for the bulk of the evidence went to show how far we were behind some other countries in providing the necessary industrial education for our young people. For five years not a single stroke of legislation was done to make any use of the report. Then in 1889 the Conservative Party brought in a bill for the provision of technical instruction in England and Wales. It was a bad bill. But, bad as it was in its beginning, it was transformed into a fairly good bill before it passed into law, and under it technical institutes were established throughout the country.

It was soon found that unless we prepared the young people in schools of a lower character to take advantage of technical education, the technical schools could only be used as night schools. The country therefore had been turning its attention to elementary and secondary instruction. We were still far behind other countries in the preparatory education necessary to enable scholars to derive the greatest benefit from technical education. The work started by men like Sir Swire Smith, and carried on almost to its perfection in institutes like that of Keighley, might be trusted, under favorable conditions, to create in this land what might almost be described as a new heaven and new earth. It would add not only to our intellectual resources, but he was quite sure to our moral and religious resources as well. It was the inner worth of the people of the town that made Keighley an example to the country. Keighley was a city set on a hill, and its light could not be hidden—a city whose people were placed in a singularly happy position.

As Sir William handed the album to Sir Swire the Mayoress led the singing of "For he's a jolly good fellow," while the entire audience rose to join in the rousing chorus.

SIR SWIRE'S THANKS.

In accepting the portrait Sir Swire Smith said the precious gift they had made to him was in itself so personal, so pleasing, and destined to be such an abiding evidence of their friendly feelings towards him, that he accepted it with unbounded gratitude. "I am conscious," he added, "that in making it 'you have used me not according to my deserts, but after your own honor and dignity,' and so, although your bounty is beyond my speaking, my heart goes out to all the subscribers to this portrait. First, I thank those old Keighley friends, among whom I have lived all my life, who know my limitations and shortcom-

ings. I thank also the many friends far away from Keighley, whose interest in this portrait is all the more to be appreciated because they are under no obligation to me. And, above all, I thank the old students of this Institute, far away and near, who have so generously and substantially recognized my own interest in their welfare. My greatest joy through life has always been in promoting their betterment and prosperity, and I rejoice that so many of them have achieved distinction not for themselves only but for our town. In my thanks I must not overlook the committee, to whose individual labors this offering is so largely due, nor my friend, Mr. Solomon, the distinguished artist, who has thrown so much of his own genius into his work, and has treated me, I hope, with some justice; but it has been tempered with much mercy. My words fail me to give expression to my gratitude to my dear old friend and colleague of thirty years ago, Sir William Mather, who has unveiled this portrait, and who has gone so far beyond my merits in the flattering things he has said of me. I have to thank also Mr. Buckmaster and all of you for the beautiful album in which you have honored me by a permanent record of the many friends to whom I am indebted for the portrait and scholarship. This album will henceforth be a cherished possession. May I conclude by saying that this portrait, while I live, shall be accorded the place of honor in my home; and may I ask you to bear witness with me, that when, in the course of nature, I shall be called away to my fathers, it shall be handed over to the corporation of the borough, to be preserved among the tokens that will be handed down to those who may come after."

THE SCHOLARSHIP.

Mr. S. Clough, in presenting the documents relating to the scholarship, said that "Sir William Mather had presented the perishable goods. He had presented the album, which would probably mildew, and the portrait which might be burned." He spoke of Sir Swire as an excellent neighbor and a good-natured opponent, and said that Sir Swire had been a friend of many people without knowing it. He had been a true Smith, for he had hammered away at the question of education for more than forty years, and helped to make it possible for the young people of to-day to do their duty better than their fathers were able to do it.

THE BEGINNINGS OF TECHNICAL EDUCATION.

Sir Swire Smith, who was loudly applauded on rising to acknowledge the gift, said that the personal honor they had already conferred upon him in presenting to him his portrait had filled him, as he had feebly acknowledged, with thankfulness. "Your gift of this scholarship (he proceeded), which you have

so generously associated with my name, confers honor and distinction upon me, but it also reflects enduring credit on yourselves. The late Professor Huxley said that it was worth while to spend a million if thereby you could find a Faraday. And this addition to the existing two fellowships already founded by the Duke of Devonshire and Mr. Andrew Carnegie will give one more chance to a Keighley boy to receive the highest intellectual training that the country can give, and possibly to achieve national fame. We can all realize that enormous progress has been made in education, but a really national system has hardly yet been established in this country, and the technical education movement as a living organization, applying the principles of science and art to our national industries, has been founded within the memory of many who are here. But, what is still more remarkable, the inventions that revolutionized the industries of the world — that made technical education absolutely necessary — were only adopted in their crudest form about a century ago. The grandfathers of some of my audience were worsted manufacturers or operatives in the district when all the operations connected with the trade were conducted by hand, and not a few of the manufacturers carried their woven pieces on their backs for sale at Halifax or Bradford. And, when hand methods yielded to machinery, our local mechanics — of whom my grandfather was one — established small workshops and began to make spinning jennies and power looms. The first cotton mill built in Yorkshire was the Low Mill at Keighley, and my grandfather, whom I well remember, assisted in putting in a steam engine — the first that was erected in a textile mill in Yorkshire. You know the old rhyme about the water mill.

Tranquilly the water glides useless on and still,
Never coming back again to that water mill.
And the proverb haunts my mind while the spell is cast,
The mill will never grind with the water that is past.

But this engine quite upset the old proverb and played havoc with the poetry, for its business was to lift the water that had passed over the wheel back on to the wheel again. There was nothing unusual in this, for the people, ignorant of science, were afraid of the steam engine, and water was believed to be the only reliable source of steady motive power.

HOW THE KEIGHLEY INSTITUTE WAS BUILT.

“The story of this little engine amply illustrates that a new era was dawning, and the real pioneers of technical education, not in England only, but in the world, were Dr. Birkbeck, who was born in Settle, Lord Brougham, and Sir Edward Baines, who, ninety years ago, realized that the inventions that I have mentioned, and, above all, the improved steam engine of James Watt, could only be utilized and developed by some knowledge of the scientific prin-

ciples underlying their construction and application. These pioneers advocated the instruction of masters and men in the principles of the arts they practised; they pleaded for libraries and reading rooms, lectures in art and science, classes in drawing, laboratories and experimental workshops, with models and apparatus. But they might just as well have cried for the moon. The State in those days did practically nothing for education. The masses were steeped in ignorance and in poverty, and practically none had received even the preliminary training that would have enabled them to comprehend the problems of science even if offered to them. Keighley even then was one of the first towns in the country to join the movement, and in 1825 it started a Mechanics' Institute in a small upper room, now a dilapidated hay loft. In 1834 it erected a creditable building, now the Yorkshire Penny Bank, where the good men and true among the members who had learned a little gave up their evenings to the teaching of those who had learned nothing; for the best Mechanics' Institutions were merely elementary night schools. When I undertook the secretaryship of the drawing classes in 1867 in the old Institute we considered ourselves passing rich in the possession for teaching purposes of the cellars of that building, and often in my boyhood did I hear it said that it was worthy to be placed under a glass shade for the great good that it had done to the town. It has generally been admitted that the erection of this building stands out as one of the important epochs in the history of our town. There was a great desire to carry out the full scheme of the founders of Mechanics' Institutes, but we realized that to do so would entail the erection of a building that would cost more than double the money that we saw any chance of raising by subscriptions. It was at this juncture that our chairman of to-night, Mr. John Clough, gave a memorable illustration of his indomitable energy and his optimistic faith in the town which has never been shaken, and which he has done so much to justify. He urged that we should carry out the scheme in its entirety, although it involved an outlay approaching £20,000, and band ourselves together to stand by the Institute till it was paid for, and make it a college for all our people. Had it not been for Mr. John Clough's courage and enthusiasm more than forty-five years ago we should not have had this Institute now.

LESSONS FROM FOREIGN COUNTRIES.

"The building was opened in 1870 and there are but three of us remaining who were then officially engaged in directing its work, Mr. Clough and the two honorary secretaries, myself and my lifelong friend, Alderman B. S. Brigg, the first Mayor of the borough. Of Alderman Brigg you will agree with me when I say that he stands preëminent among all our citizens for the services that he has rendered to his native town, services for which he can

never be repaid. Our unanimous wish is that he may long be spared to give the benefit of his invaluable experience in directing the affairs of the town and to enjoy, with his loving helpmate, Mrs. Brigg, the affection and esteem of its inhabitants. We had witnessed the great progress of Germany and other countries in their manufacturing industries and had heard of their efforts and success in promoting technical education, and so, in 1872, a deputation from Keighley visited Germany and other countries for information. We found in each country a highly organized compulsory system of national education from the bottom to the top, with a recognized ladder enabling talented boys to climb from the elementary schools to the universities. But we found also that the scheme for the technical education so strenuously advocated by our own pioneers had been adopted in the fullest detail by our rivals, and the cities and countries vied with each other in the magnificence and equipment of their school buildings. In short, the technical schools were the Mechanics' Institutes writ large that Birkbeck, Brougham, and Baines had tried to establish in England fifty years before, and which it was alleged that we were too poor to build. Our rivals acknowledged our superiority in practical training, and turned their attention to the scientific side, which we had altogether ignored. Here was the secret of their industrial success. We had no such institutions in this country.

KEIGHLEY AS A PIONEER.

"We returned from our Continental inquiries deeply impressed by what we had seen and determined as far as possible to apply in our own town the lessons we had learned. This, of course, involved something like a revolution in the educational equipment of Keighley. This Institute, with its extensive accommodations, was a magnificent instrument ready to our hands. The day school, organized as a secondary science school, drafted by scholarships the clever boys from the elementary schools, and we sent more winners of scholarships to the Royal Colleges of Science and Art in London than any city or town in the kingdom. What is equally remarkable, we have continued to do so, and at the present time Keighley is represented at South Kensington by seventeen free student exhibitors and by six old students on the teaching staff, including the Principal of the Royal College of Art. But these are not all our successes, for in addition we have seven more former students at the universities, making a total of thirty at the highest seats of learning—a proud record for one school. Employers and employed coöperated in securing the attendance of apprentices, young men and women, at the evening classes. It thus became the pioneer technical school of the country, arousing public attention first as an experiment and next as a marked example.

"In the early seventies of the last century the factories and

workshops of Keighley were all busy making goods and machinery for distribution over the world. Keighley's hand went through every land. The Institute with its thousand students was the busiest workshop of all, qualifying young men and women for their industrial work and for their duties as citizens. And so, when in the beginning of the eighties, the formidable competition of our rivals in manufacturing industries compelled the attention of Parliament to our educational deficiencies, and a Royal Commission was appointed to inquire into them, Mr. Mundella, the Minister of Education, invited me to join the Commission. He afterwards told me that more than fifty Members of Parliament had wanted the post, but that his department had been so impressed by the successful efforts of Keighley to solve in a practical way the problem that the Commission was appointed to investigate that he had selected me to represent the wool industry in this important inquiry.

THE "TOO POOR" ARGUMENT.

"The story of the work of that Commission is contained in five ponderous volumes, and has often been told. My old friend and colleague, Sir W. Mather, who is with us to-night, made lengthened tours in the United States, Canada, and Russia, and contributed an invaluable report on their technical schools and industries. We visited nearly every important school and workshop in each of the advanced countries of Europe and America, as well as in the United Kingdom. We interviewed the most eminent inventors, manufacturers, scientists, and professors of the time, and we demonstrated that our most effective competitors in every country were those who were paying most attention to scientific training. In answer to the alleged complaint throughout the country that we were too poor to build technical schools, we were able to show, from our imports of foreign manufactures, that in spite of our poverty we were maintaining many of the technical schools abroad by buying the product of those who had been trained in them. Yes, and we proclaimed that we should continue to maintain foreign schools until we provided schools as efficient in our own country. The recommendations of our report formed the basis of the Technical Instruction Act of 1889, which has done so much for the country, and which I believe would never have got through the House of Commons but for the determined and persistent support that was given to Sir William Hart Dyke, who had charge of the bill, by Sir William Mather. When Professor Huxley was Dean of the Royal College of Science at South Kensington he declared that Keighley had practically solved the technical education problem, and the late Duke of Devonshire, as Minister of Education and president of the National Association for the Promotion of Technical Education, stated on more than one occasion that the object of the Associa-

tion was to induce the rest of the country to follow the example of Keighley. The Institute was handed over to the Corporation in 1904 and some two years after I was released from my official connection with it, after more than forty years of active service. It is, however, a great satisfaction to me to know that the work goes on with unabated energy and success. I rejoice that, with the completion of the new wing now in progress, it will establish a further record of usefulness which, I am confident, will react on the prosperity of the town.

FOREIGN COMPETITION.

"I have witnessed great changes in the development of education in this country since those early days when I began my educational experience as the secretary of the evening classes. I believe I may say without hesitation that there is more sound instruction in science and art given at the present time in the classes of this Institute than you could have found in the whole of Yorkshire at that time, and the effect has shown itself in every industry. The change may be best measured by the position of our manufacturing industries in their competition with their rivals at home and abroad. In manufacturing for the million — especially in textiles — we have always taken a leading position, which I believe we retain; but in the higher branches of craftsmanship, represented by artistic training, and in the chemical and electrical industries depending on scientific knowledge, we have generally had to submit to the superiority of some other countries. It is only in recent years, since our schools began to bear fruit, that we have had the temerity to show our artistic productions against those of the Continent. But it is now acknowledged that in the creations of applied art, not only in pictures, but in metal and woodwork, furniture, pottery, and in other artistic productions, Britain has risen from a very low place to a level equal with the highest. The result is undoubtedly due in a large measure to our great advancement in technical education in the training of our people for their work.

"Here, then, in the progress of this great movement is my reward and that of many in Keighley and elsewhere throughout the kingdom who have so long labored through good report and evil report in this cause. As a nation we have wakened up; we are more ready and willing than ever before to learn from others all that they can teach us, and, while I take real pleasure in looking back, I am full of hope and confidence in looking forward. I am conscious, however, that much remains to be done. Our two formidable rivals, America and Germany, are putting forth their great powers in the educational equipment of their people, and in many respects they are making greater sacrifices than we are in this direction. We are showing great jealousy of some other nations and equal determination in maintaining our efficiency in the art of war. I hope we shall show even greater determination

in promoting the efficiency of our people in the arts of peace, on which our livelihood depends.

A WORD TO THE YOUNG MEN.

“ I do not believe that there can be any higher patriotism than in laboring for the betterment of our people through the development of their individual efficiency. I would that these words could influence the young men of our town who are in a position to help in shaping and moulding the future destinies of our people, and yet are taking no part in doing so. The older men who are passing out of the ranks now may well call upon the young to take their places, to consecrate at least a portion of their leisure to the uplifting of those who are around them. And the same responsibility falls on the rank and file to take advantage, as many of their fathers did, of the facilities provided for their advancement. I sometimes wonder if there is the same spirit among the students now, the same readiness to make sacrifices, as I used to find among the students of the Institute thirty years ago. There is hardly a Keighley man in the whole district holding a position of responsibility either as employer or workman who did not in his youth attend the classes in science or art at the Institute. They did not know then what prizes their efforts would bring them. They thirsted for knowledge to qualify them for their work, and they got it, and many of them got refinement and culture as well. Are the young men of to-day seeking improvement in the same spirit? I know that you may find conspicuous examples of them in every department of the Institute, but what are these among so many? I asked a boy once in the School of Art what trade he was learning. He said, ‘ I am apprenticed to be a joiner, but I mean to be an architect.’ He is now a Government inspector of art schools in London. On another occasion an evening student from a machine shop told me that his ambition was to win a Whitworth Scholarship. He won it, and is now one of the eminent professors of engineering in the country. A third student in the School of Art worked hard that he might excel; he won a scholarship to South Kensington, and is now the principal of the Royal College of Art, helping on many Keighley students. These are examples, of which I could give scores, of the enthusiasm, the determination, the ambition that inspire the true students, and which I hope we may find cultivated in even larger measure in the future. Such is the spirit that not only commands success but deserves it, and the determination of our town to keep abreast in education — elementary, secondary, and technical — is a sound omen of future prosperity and of higher civilization. The founding of this scholarship by friends and old students far and near is a further illustration of your willing sacrifices for giving equality of opportunity even to the poorest, and a token of personal friendship and esteem that I appreciate

beyond words, in that for all time you have so generously associated this scholarship with my name."

THE MAYOR'S ACCEPTANCE.

Sir Swire then passed the scholarship on to the Mayor (Mr. W. A. Brigg), who said he counted it as one of the happiest events of his term of office to receive that handsome endowment of a scholarship for their Keighley school. It was not the first gift the town had received, if not from Sir Swire himself, at least through his intervention. The great building on the other side of the street was a proof of his influences in bringing to his native place the gifts of others. That latest gift which had come to them was a most appropriate one in every way. They in Keighley needed no monument to remind them of Sir Swire's many virtues and achievements. The building in which they were gathered, and the extension of it now being made, the great work of which they had heard, the forty years of students who had benefited by that work, and in fact the very position of education itself in England to-day, all these reminded them of the great energy and self-sacrificing services of the man they were honoring. They could say of him as was said of Sir Christopher Wren in the precincts of St. Paul's: "If you ask for his monument look around you." No happier way could have been chosen to keep Sir Swire's name in remembrance in future ages than that gift, which, on behalf of the town, he accepted with gratitude, and handed over into the keeping of Alderman Brigg and Alderman Longsdon, the chairmen of the Education Committee and Higher Education Sub-committee.

OPPORTUNITIES FOR THE YOUNG.

Alderman Brigg, who accepted the scholarship on behalf of the Education Committee, said that, thanks to the generosity of the Duke of Devonshire and Mr. A. Carnegie, the committee had for some years been in the enjoyment of two scholarships of £50 per year each, by which the successful students might have each a three years' course of training. But there had always been one year in every three when a vacancy had occurred without any scholarship to fill it. The "Sir Swire Smith" scholarship would fill the vacant year, and in each year of the school course one of these three £50 scholarships would be open for competition.

A vote of thanks to the Chairman was proposed by Sir William, and seconded by Professor Watkinson, both gentlemen speaking highly of the work done by the Chairman in the way of the educational advancement of the town.

The Chairman replied, and the meeting closed with the singing of the National Anthem.

The following letters were received and read:—

From the Duchess of Sutherland:

I cannot tell you how deeply I regret that I cannot be present to unveil the portrait of Sir Swire Smith. Private affairs have made this quite impossible. I owe so much to Sir Swire Smith's advice and friendly interest from the early days of the small educational efforts I have been able to make in Scotland that I particularly regret not being able to do him this small service as a token of admiration and gratitude.

From Prime Minister, Mr. H. H. Asquith, M.P.:

I hear that it is proposed to present a memorial to Sir Swire Smith, expressing appreciation of his services to the country in connection with technical education. I am glad to know that the promoters have wisely allowed friends outside the neighborhood of Keighley to join in their scheme, and I should be glad to allow my name to be associated with so excellent an object.

From the Right Honorable Sir Henry Roscoe, Member of late Royal Commission on Technical Instruction:

I learn with great satisfaction that the presentation of Mr. Solomon's portrait of my old and valued friend Sir Swire Smith is to be made on Tuesday next and I very much regret that I am unable to be present on that occasion. This recognition of Sir Swire's life-long services to the cause of Technical Education is welcomed by every friend of social and industrial progress not only in the neighborhood where he has worked so long and so successfully, but throughout the length and breadth of the land, for surely few men have done as much for the furtherance of these objects as my old friend.

Sir Philip Magnus, M.P., Member of late Royal Commission on Technical Instruction:

I am glad to associate myself with those who are honoring my old friend Sir Swire Smith. No one appreciates more keenly than I the enthusiasm he has succeeded in arousing in the cause of Technical Education. Lord Haldane well says that what we need is enthusiasm for education, such as is manifested in the United States. I can look back more than thirty years, and during all that time Sir Swire Smith has given up his leisure and directed his best thoughts to the improvement of our education system, and his efforts and those of others with whom he has worked, have been attended with a large measure of success. I can only hope that he may live many years in health and strength, loved by his friends and honored and respected by all who know him.

Mr. Gilbert R. Redgrave, late Senior Government Inspector of Schools :

It was my privilege, as the Secretary of the Technical Instruction Commission, to see more than most men of Sir Swire Smith's unwearying work and educational zeal. Indeed, but for his devotion as a taker of notes, I am afraid many of our commission records would be very scanty. We traveled together throughout Europe, reaching at one time remote parts of Servia, but nothing daunted him and we always managed to get through and see all that there was to be seen in the way of schools and factories. No amount of work ever seemed to tire Sir Swire Smith, and Keighley does well to honor him, for has he not made Keighley famous as an educational center.

Mr. Percy Illingworth, M.P. (Chief Whip, Liberal Party) :

Sir Swire Smith never grudged giving his time and energy for the public good, and I think this recognition of his many years of devoted service is a most happy one.

Dr. William Garnett, the Director of Education to the London County Council :

I should have been very sorry to have been permanently omitted from the list of those who desire to do honor to Sir Swire Smith, whose lifelong devotion to the education of workers of all classes merits the highest recognition that can be accorded.

Professor Beaumont also writes from the Leeds University :

I have known Sir Swire for almost a quarter of a century as an ardent enthusiast and consistent worker in the educational world.

TRIBUTES FROM AMERICA.

Mr. S. N. D. North, of the Carnegie Endowment for International Peace at Washington, and late head of the United States Census Department, writes :

If there could have been a wider knowledge of this movement among his American friends, the privilege of contributing to this testimonial would have been welcomed by many more of them. It may not be known to you that Sir Swire Smith's long, devoted and enthusiastic campaign in behalf of the extension of technical education bore fruit in the United States as well as in Great Britain. When I was editor of the Bulletin of the National Association of Wool Manufacturers, I was accustomed to watch for his addresses on this subject as they appeared in the press of your country and to republish them, often in full. They went from our journal into many other magazines and papers, and played a very large part in creating the public sentiment which

resulted in the establishment of many technical schools in different parts of the United States. . . . His services in the cause in both countries were so marked and so fruitful that I have often wondered why his chief addresses on the subject have not been gathered together in book form and published as a permanent contribution to the literature of the subject as an incentive and inspiration to the further development and extension of technical education.

Mr. Leslie W. Miller, Principal of the Pennsylvania Museum and School of Industrial Arts, Philadelphia, says :

Nothing that any of us can do or say will be too good for this occasion; no man has served his day and generation more faithfully or efficiently than Sir Swire Smith, and it is a pleasure to testify one's appreciation and recognition of such service in the attractive form which this movement indicates.

Mr. Franklin W. Hobbs, Boston, U.S.A. :

Sir Swire Smith has many friends in this country as well as in England, and it has always been a pleasure and privilege to meet him, and I am very glad to contribute to this well deserved honor.

Prof. Arthur Smithells, F.R.S., writes :

I do not know why I was not made aware of impending events and allowed to share with others the privilege of formally testifying to the feelings of admiration which I entertain to Sir Swire Smith and his great work in the cause of education. I should have done so with the greatest pleasure.

SPECIFIC OR AD VALOREM?

AN ANCIENT CONTROVERSY ILLUSTRATED IN A NEW GUISE.

THE new Simmons-Underwood tariff law, true to the traditions of its authors, is based on the ad valorem system wherever practicable, though this flies in the face of the soundest economic teachings and the actual tariff practice of all modern nations. Some new light is thrown upon an ancient controversy in this anecdote from the Camden, N.J., "Argus," signed "Observer":

Two sophomores were passing along the street of their home town, and the ad valorem duty system caused a sharp clash of words. As they drew near the public reading-room, they noticed three local oracles—a retired lawyer, a sea captain, past

cruising, and a clergyman whose four score and five years had not clouded his brain.

"By the way, Tom," observed Ned, "let's see what these old men think of it. None of them have any interest in any manufacturing plant, all three are out of life's struggle, they are likely to be unprejudiced." Tom assented, the young men entered the building, and Ned asked Captain Topsel if he had ever studied the question of ad valorem or specific duties.

"Very little," said the sea dog; "I never knew the duty on any article unless it was part of my cargo. I never traded on my own account. But this every man who goes to sea has to learn. Anybody who wants to be honest can easily find out how many barrels of pork, how many tons of coal, how many yards of cloth his vessel carries. It's when it comes to reckoning up the value of the articles that one collector puts a high estimate on a consignment, another man wants a lower estimate, disputes lead to lawsuits — there's always more fraud in reckoning up what a thing may be worth than in weighing or measuring. No matter how low the duties may be, some importers always try to evade the revenue, and the frauds under the tariff of 1857 were so rank that the greenest cabin boy heard of them. Nearly thirty years afterwards the whole subject came back to me when I read the report on ad valorem duties by Daniel Manning, Secretary of the Treasury under Cleveland."

Tom, who was a rabid free trader, did not like to hear of Manning's report. He turned to the lawyer, William Pinkney Brown, and asked for his views on the ad valorem or specific duty matter.

"My answer is not of much value," replied the old lawyer. "In my entire practice I never had a case dealing with the tariff, though I have read more or less about the shameless frauds that led Great Britain to change so many ad valorem duties to specific rates." (Tom was visibly annoyed at this.) "During my life, I have settled many estates, and have found out that if a testator leaves behind him three houses, fifty acres, six horses, twenty cows, or thirty pigs, the count is easily made. All that is specific. But if an executor wishes to favor somebody he may sell rare old books, handsome pictures, fine carpets, pianos or silverware at rascally low prices. To my knowledge this has been done. A library well worth a thousand dollars was sold for three hundred. If the heirs do not know the value of horses they are swindled to the king's taste. The trickeries possible under estimates of values remind one of the lowest kind of auctions, sometimes it is difficult to prevent them, while any blockhead who means to be honest can count the number of lots a testator owns."

Tom did not want Ned to see his irritation, hence he politely inquired as to the views of the Rev. Joseph Butler Smith. "Tariff matters are not in my line," replied the old parson. "I come from a free trade college, and a Democratic family. Dur-

ing the war for the Union I became a chaplain, and have for many years been active in the Grand Army of the Republic. I never knew a case of fraud in an application for service pension — if A. B. was enlisted on such a day, and mustered out on such a day the records showed it. Every fraudulent case I ever heard of was a disability claim. Sometimes a man would get a pension alleging that he contracted disease while in the army, though he was diseased before the war. It sometimes happened that wounds or sickness had no connection with military service, but the government was bled none the less. Senator Cameron, of Pennsylvania, after he had been Secretary of War, planned a service pension system under which he claimed there could not be any deception. My own view is that the vast majority of soldiers deserve their pensions, but that whenever the government has been wronged it was fleeced by letting men apply the *ad valorem* system to their injuries rather than go by the specific points of enlistment and discharge."

As the young men went on their walk Tom remarked, "I had no idea that the old gentlemen could put their case so well."

THE ART OF BLENDING.

A MOST IMPORTANT STEP IN THE PROCESSES OF THE WOOL MANUFACTURE.

A FINE art in the wool manufacture is the blending of the wools, and a clever description of this process is given in a recent issue of the "Yorkshire Observer" of Bradford, England, as follows:

Making a woolen blend is one of the most skilled operations connected with woolen manufacturing. It requires a thorough knowledge of how the fibers will combine with each other, and the cost must work out at so many pence per pound, with a very small margin for error. The mixture may consist of mohair, camel-hair, shoddy, mungo, extract, and noils of all descriptions, as well as cotton and silk waste, but the whole must be so blended that no particular fiber stands out prominently, or the result will be unsatisfactory and beyond all cure. The length of the staple is an all important item, since it affects the conditions of mixing proportions very much more than the weight, and will in itself completely change the character and appearance of yarn or cloth made from it. Short wools are best adapted for blending, either as mixtures of different colors or qualities. Those of long staple are difficult to mix with short fibers, and tend to appear on the surface of the cloth when manufactured, besides requiring to be broken up in the carding. Imperfect blends result in

streaky yarns. The streakiness may not be visible to the eye if the colors are the same, but it will show in the manufactured article. The nearer the fibers approach each other in length of staple the simpler is the blend to make.

THEORY AND PRACTICE.

The theory of blending may possibly be explained in our technical schools, but it can never be put down in formula, or conducted on hard and fast lines like that of weaving, since the materials vary so much that nothing but long experience can be trusted, while a fraction of a penny per pound may make all the difference between a profit and a loss. The various bodies used for making blends may be briefly described as follows: Shoddy is wool pulled from fairly long-stapled material, which has not been milled, or if so only slightly, and that known as "softs" is open and easily disintegrated, yielding comparatively long and sound fibers which vary in staple according to the rags from which it is pulled. At times shoddy is worked up alone into heavy counts of yarn, but is more frequently mixed with new wool, and employed in the making of good average yarns for all classes of all-wool cloths.

Mungo is the pulled fibers from cloths which have been heavily milled or felted; consequently the natural resistance of the material results in the fibers being short, and averaging from $\frac{1}{5}$ to $\frac{2}{5}$ of an inch in length. On this account mungo is ill-adapted for working up into yarn alone, and is usually mixed with something with a longer staple, or with cotton, and is commonly made up into low counts of weft yarns. Having once been through the felting process, mungo fibers have lost much of their felting capacity owing to their surface scales being more or less damaged by disintegration, and being a very short fiber it requires careful judgment on the part of the blender to know what class of material will best go along with it. For making cloths with a fine dense mossy nap, mungo answers extremely well, but requires some binding material along with it to compensate for its shortness of fiber. Extract wool is that produced from rags which have contained cotton or vegetable matter, which has been removed by carbonizing with acid before the rags were pulled.

The best cotton for a woollen blend is the rough Peruvian, which strongly resembles wool in being long, rough, and curly. It goes frequently by the name of vegetable wool, and might easily deceive anyone but an expert. In the manufacture of merino yarns it is extensively used, and in addition to lessening the cost of manufacture, it confers strength and luster, besides reducing the property of the wool to shrink. Wool noils are the short fibers separated during the process of combing, and these being pure new wool, form the best and most expensive materials in a woollen blend. Camel-hair noils are the short fibers from

camel's hair. The hair consists of fine yellowish brown curly fibers, mixed with dark brown coarse body hairs, 2 inches to $2\frac{1}{2}$ inches long. Both the fine and the coarse hair show a faint scale development under the microscope, and in a similar case with ordinary wools, the coarser fibers show traces of a central canal, or medulla, which is missing in the fine hairs. When mohair figures in a blend it is commonly as mohair noils, which are the short fibers from the hair of the Angora goat, and the term mohair is rather expansive, as it covers the fleeces of a large number of Angora crosses. The animal is a native of the interior of Asia Minor, but is now extensively raised in Cape Colony, and to some extent in North America. Its color is usually white, more rarely gray, and the fiber has a fine, curly texture of high luster, and an average length of 5 inches to 6 inches.

Alpaca noils are the short fibers from the combing of alpaca wool, the hairy covering of the alpaca—a group of animals indigenous to the highlands of the South American Cordilleras, where they are met with both in a domestic and a wild state. This group embraces the Llama, the Vicuna, and the Guanaco, all of which, however, are less important than the alpaca from the fiber point of view. Alpaca is a lustrous fiber, but inferior in this respect to mohair, while the outer scales are extremely fine, and the pith, or medullary substance, is present throughout the fiber, with breaks at intervals. For fancy yarns, silk noils are used in combination with wool. These are the short waste obtained from combing or carding spun silk. Both silk and cotton must be entered into a woollen blend only after the wool fibers have been oiled. The reason for this is that if the oil comes directly into contact with either silk or cotton it prevents the fibers from opening out freely during the carding process.

THE MIXING OPERATION.

The mixing of a blend is done by carefully building up a stock of the raw material on the floor of the mixing room, placing the different fibers in thin layers one on top of another. For example, in a mixture of wool, cotton, and shoddy, a layer of wool is first laid down a few inches thick, covering some square yards of the floor. Over this an even layer of a few inches of cotton is placed, followed by a similar layer of shoddy, and these successive layers are repeated and levelled up by the use of long rods, so that a pile two yards high is often reached covering an area of many square yards, since the larger the mixing the more uniform will be the fabrics produced from it. When great extremes in fiber length have to be mixed, some medium lengths should be present so as to unite them properly. In a case of this sort, the order of mixing would be the short and medium first, then a blending of this with the longer fibers. Or supposing three lengths of staple to be blended, by mixing one-half of the

quantity of the two lowest with the longest, and the remainder with the shortest, two lots of a mixture are obtained which can be easily dealt with separately in the mixing picker, and afterwards the two can be mixed together as if dealing with only two grades of material.

After building up the pile layer by layer, the pulling for the mixing picker is done by taking armsful all along one side, from top to bottom, keeping the sides of the pile perpendicular by pulling straight down to the bottom. Only by this method can a thorough mixing be obtained, and if a very small quantity requires blending with a larger, the best method is to make a temporary mix of equal parts of the two, and then build this up into a stack with the larger constituent.

ENGLISH WOOL CENTER NOTES.

MR. AUGUSTUS E. INGRAM, American Consul at Bradford, England, sends various interesting notes of the English woolen trade, which are printed in the "Daily Consular and Trade Reports" for August 16, 1913, as follows:

WOOL COMBERS' MINIMUM WAGES.

As arranged at a conference of representatives of masters and men held on May 21, the new minimum wage in the wool-combing industry went into operation on July 4. The conference was called as a result of the complaint that there was a great disparity in wages paid by various employers. The minimum wage is now \$3.53 per week for women, and \$6.20 per week for night work which is done by men. The new terms mean an advance of 24 cents a week for women and 49 cents a week for men. They apply to Bradford, Shipley, Bingley, Halifax, and Huddersfield establishments.

HIGHER WOOL-COMBING CHARGES.

The Commission Woolcombing Employers' Federation in Bradford has sent out notices of proposed increased charges for combing, to take effect on October 1 next. This has led to several protests, as it is claimed that, having regard to the period over which contracts for wool tops are taken, at least six months' notice of an advance should be given. It is uncertain, however, if any postponement will be made. Present rates have been ruling since July 1, 1910, and generally speaking the added charges are one-half cent on merinos and one-quarter cent on crossbreds. Among the reasons advanced by the combers for higher prices are increased wages and higher cost of commodities, such as oil and soap, used in wool-combing.

WEAVERS OF HEAVY WOOLENS GRANTED AN INCREASE.

After lasting nine weeks the weavers' dispute at Yeadon and Guiseley, where heavy woollens are manufactured, has been settled. The workers, men, women, and children, have been making hunger marches to neighboring cities and towns. The working week has been fixed at 55½ hours, and overtime, which is to commence at 5.30 or 6 P.M., according to the times of starting, is to be paid for at 2 cents per hour above the ordinary day rate for the first 2½ hours, and afterwards at 4 cents per hour above the ordinary rate. Various alterations in wages in the different departments have also been made — for instance, willeyers and fettlers, rag grinders and packers to be paid at 12 cents per hour. As regards weaving, Melton cloths of 25 to 29 and 30 to 34 picks are to be advanced 12 cents; from 35 to 39 picks, 24 cents increase, and over 44 picks the price is to be 12 cents for every four picks instead of 12 cents for five picks as previously.

 ENGLISH WOOLS SOLD IN COLEMAN STREET.

AN experiment in the wool trade that has aroused much interest in England was witnessed lately at the London wool sales. The Brandsby Agricultural Coöperative Association had forwarded something like 7,000 fleeces, properly locked and skirted in Colonial fashion, in order to test the suitability of that center for the sale of English-grown wools. Says the "Wool Record" of Bradford, July 24, 1913:

The fleeces had been handled by a Bradford classer, and the object of the Association was to demonstrate to farmers that by selling in this way they could obtain better financial results than by offering their fleeces locally to the wool buyers who visit the districts of the East Riding of Yorkshire in general. Naturally the experiment has been watched with considerable interest by West Riding wool merchants as well as English sheep farmers, the Brandsby Association simply attempting to carry out the proposals of the Agricultural Organization Society of London.

So far as the wools themselves were concerned, they were a somewhat miscellaneous selection, but as already said they commanded the full attention of crossbred buyers, particularly Bradford. Various views are expressed on this new departure, and we want to say nothing but what is fair and square to all parties. We understand that the Agricultural Association authorities were satisfied with the competition and the prices paid, but there are others who are confident that farmers would have done better had the wools been sold on their farms. At the same time, one must not overlook the fact that between similar wools

being offered in the country and the sale of this parcel in Coleman street, prices had slightly fallen. In calculating the actual value received, one must not forget the freight of the wools from Yorkshire to London and back from London to Yorkshire, together with warehouse and selling charges and other commissions, and this is what Bradford buyers have in mind when they say that farmers would have done better by selling their wool at home. Probably the Agricultural Association will think otherwise. We are certain that the wools were well shown and well handled by Messrs. John Hoare & Co., and we may hear more about them later on. We give below a full detailed account of the wools offered and the prices made :

Description.	Mark B.A.T.A.	Tare.	Bales.	Price.
				s. d.
Washed Southdown hog'ts	Brandsby.	7	3	1 3
“ “ “ “	“	“	2	1 3
“ fine half-bred	“	“	3	1 2
“ “ “ hog'ts	“	“	2	1 1½
“ “ “ “	“	“	4	1 1½
“ “ cross comb.	“	“	2	1 1½
“ A fine cross hog'ts	“	“	12	1 1
“ 1st “ “	“	“	34	1 0½
“ 2d “ “	“	“	31	1 0½
“ 1st “ wethers	“	“	36	1 0½
“ 2d “ “	“	“	42	1 0
“ Lincoln hog'ts	“	“	3	1 0½
“ Scotch	“	“	1	9¾
“ Blackfaced	“	“	2	9½
“ Cross black	“	“	1	11½
“ “ “	“	“	1	11
“ “ pieces	“	“	6	11
“ “ bellies	“	“	7	1 0½
“ “ locks	“	“	5	9¼

Dealing with the above sale and prices, a well-known authority makes the following observations: “You must remember this wool was offered in London as an experiment in the face of much opposition, and as an experiment we think it successful, taking the fall in markets, monetary conditions, etc., into consideration. From the papers we gather that prices at the country fairs were no better than in London at the time the wool was sold. This is all that could be hoped for as a first attempt.”

342 NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.

COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF WOOL AND MANUFACTURES OF WOOL FOR THE TWELVE MONTHS ENDING JUNE 30, 1912 AND 1913.

GROSS IMPORTS.

ARTICLES AND COUNTRIES.	Quantities for Twelve Months ending June 30.		Values for Twelve Months ending June 30.	
	1912.	1913.	1912.	1913.
WOOL, HAIR OF THE CAMEL, GOAT, ALPACA, AND OTHER LIKE ANIMALS, AND MANUFACTURES OF:				
UNMANUFACTURED—				
Class 1—Clothing (durable)—	<i>Pounds.</i>	<i>Pounds.</i>		
Imported from—				
United Kingdom	30,928,128	29,368,707	\$6,991,933	\$6,829,223
Belgium	62,478	266,930	11,868	62,537
Argentina	21,450,715	22,603,402	3,764,947	4,814,413
Uruguay	2,666,702	2,657,620	525,147	615,541
Australia and Tasmania	12,971,908	5,619,342	3,163,319	1,515,905
Other countries	3,123,398	6,722,714	648,979	1,585,301
Total	71,203,329	67,238,715	\$15,106,193	\$15,422,920
Class 2—Combing (durable)—				
Imported from—				
United Kingdom	11,772,512	13,912,072	\$2,738,303	\$3,475,287
Canada	631,216	243,908	150,564	53,440
South America	1,524,382	1,273,289	376,168	350,629
Turkey in Europe	1,331,486	967,525	473,324	258,419
Other countries	298,068	489,652	63,675	128,552
Total	15,557,664	16,886,446	\$3,802,034	\$4,266,327
Class 3—Carpet (durable)—				
Imported from—				
Russian Empire	20,757,933	25,645,077	\$2,829,328	\$3,458,426
United Kingdom	23,122,561	20,900,746	3,707,169	3,586,462
Other Europe	12,975,935	13,484,980	1,755,049	1,973,896
Argentina	4,429,123	2,337,196	516,928	278,016
China	32,060,405	35,926,815	3,655,382	4,721,949
East Indies	4,440,606	3,962,811	514,305	501,089
Turkey in Asia	7,780,616	7,394,257	1,071,331	1,183,294
Other countries	1,072,541	1,516,212	1,0,623	187,444
Total	106,639,720	111,168,094	\$14,170,115	\$15,890,576
Total unmanufactured	193,400,713	195,293,255	\$33,078,342	\$35,579,823
MANUFACTURES OF—				
Carpets and carpeting (durable)—	<i>Sq. Yards.</i>	<i>Sq. Yards.</i>		
Imported from—				
Turkey in Europe	256,917	281,927	\$1,411,338	\$1,459,823
United Kingdom	140,385	129,769	445,574	496,856
Asia	379,466	589,573	1,647,541	2,443,571
Other countries	64,481	84,162	546,351	495,739
Total	841,249	1,085,431	\$3,850,804	\$4,895,989

COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF WOOL, ETC.

GROSS IMPORTS. — *Continued.*

ARTICLES AND COUNTRIES.	Quantities for Twelve Months ending June 30.		Values for Twelve Months ending June 30.	
	1912.	1913.	1912.	1913.
Clothing, ready-made, and other wearing apparel (dutiable)	<i>Pounds.</i>	<i>Pounds.</i>		
			\$2,171,477	\$2,158,384
CLOTHS— (dutiable)—				
Imported from—				
Belgium	474,229	545,401	\$530,932	\$617,599
Germany	785,472	941,160	786,816	940,906
United Kingdom	2,606,475	2,496,457	2,994,215	2,890,276
Other countries	252,934	302,477	318,515	439,666
Total	4,119,110	4,285,495	\$4,630,478	\$4,888,447
DRESS GOODS, WOMEN'S AND CHILDREN'S— (dutiable)—	<i>Sq. Yards.</i>	<i>Sq. Yards.</i>		
Imported from—				
France	3,493,228	3,198,351	\$814,860	\$811,733
Germany	2,162,516	2,056,549	533,356	521,141
United Kingdom	9,670,545	10,312,794	1,908,994	1,943,762
Other countries	88,956	144,461	21,988	44,990
Total	15,415,245	15,712,155	\$3,279,198	\$3,321,626
All other (dutiable)			\$980,662	\$1,053,695
Total manufactures of			\$14,912,619	\$16,318,141

EXPORTS OF WOOL AND MANUFACTURES OF.

FOREIGN.				
ARTICLES.	1912.	1913.	1912.	1913.
	Quantities.	Quantities.	Values.	Values.
WOOL, HAIR OF THE CAMEL, GOAT, ALPACA, AND OTHER LIKE ANIMALS, AND MANUFACTURES OF:				
UNMANUFACTURED—				
Class 1—Clothing (dutiable) lbs	1,213,449	3,103,709	\$268,540	\$652,677
Class 2—Combing “ “	15,699	138,139	4,118	30,137
Class 3—Carpet “ “	490,722	1,181,313	56,581	140,917
Total unmanufactured	1,719,870	4,423,161	\$329,239	\$823,731

COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF WOOL, ETC. — *Concluded.*EXPORTS OF WOOL AND MANUFACTURES OF. — *Continued.*

ARTICLES.	1912.	1913.	1912.	1913.
	Quantities.	Quantities.	Values.	Values.
MANUFACTURES OF—				
Carpets and carpetings, sq. yds., dutiable	3,226	6,338	\$62,222	\$53,207
Clothing and other wearing apparel, dutiable			11,023	12,451
Cloths, ponuds, dutiable	28,194	39,492		35,965
Dress goods, women's and children's, sq. yds., dutiable	189,942	433,298	25,060	
All other, dutiable			34,602	72,691
			15,176	23,081
Total manufactures of			\$118,083	\$197,395

DOMESTIC.

WOOL, AND MANUFACTURES OF:				
Wearing apparel			\$1,743,022	\$2,460,326
Woolen rags, pounds*		27,774,432		923,184
All other			792,879	1,099,996
Total manufactures			\$2,535,901	\$4,483,506

* Included in "All other wool manufactures," prior to July 1, 1912.

WOOL AND MANUFACTURES OF WOOL REMAINING IN BONDED WAREHOUSE JUNE 30, 1912 AND 1913

ARTICLES.	1912.	1913.	1912.	1913.
	Quantities.	Quantities.	Values.	Values.
WOOL, HAIR OF THE CAMEL, GOAT, ALPACA, AND OTHER LIKE ANIMALS, AND MANUFACTURES OF:				
UNMANUFACTURED—				
Class 1—Clothing, lbs.	41,418,195	45,484,999	\$9,267,993	\$10,949,960
Class 2—Combings, lbs.	3,380,820	4,212,460	750,768	1,067,022
Class 3—Carpet, lbs.	14,648,768	28,489,883	2,124,090	4,472,796
Total unmanufactured, lbs.	59,447,783	78,187,342	\$12,142,851	\$16,489,778
MANUFACTURES OF—				
Carpets and carpeting, sq. yds.	299,771	403,926	\$517,431	\$1,061,367
Cloths, lbs.	741,517	939,966	837,545	1,030,547
Dress goods, women's and children's, sq. yds.	5,741,981	7,020,937	1,172,160	1,418,121
Wearing apparel			254,092	326,244
All other			467,432	488,226
Total manufactures of			\$3,238,660	\$4,354,505

QUARTERLY REPORT OF THE BOSTON WOOL MARKET
FOR APRIL, MAY AND JUNE, 1913.

DOMESTIC WOOLS. (GEORGE W. BENEDICT.)

	1913.			1912.
	April.	May.	June.	June.
OHIO, PENNSYLVANIA, AND WEST VIRGINIA.				
(WASHED.)				
XX and above	29 @ 30	27 @ 28	26 @ 27	29 @ 30
X	27 @ 28	26 @ 27	25 @ 26	28 @ 29
1/2 Blood	34 @ 35	32 @ 33	30 @ 31	34 @ 35
1/4 "	34 @ 35	32 @ 33	30 @ 31	34 @ 35
1/8 "	33 @ 34	31 @ 32	30 @ 31	35 @ 36
Fine Delaine	30 @ 31	28 @ 29	27 @ 28	31 @ 32
(UNWASHED.)				
Fine	21 @ 22	20 @ 21	20 @ 21	22 @ 22
1/2 Blood	25 @ 26	23 @ 24	23 @ 24	27 @ 28
1/4 "	26 @ 27	23 @ 24	23 @ 24	27 @ 28
1/8 "	25 @ 26	23 @ 24	23 @ 24	28 @ 29
Fine Delaine	25 @ 26	22 @ 23	22 @ 23	26 @ 26 1/2
MICHIGAN, WISCONSIN, NEW YORK, ETC.				
(WASHED.)				
Fine	33 @ 34	31 @ 32	31 @ 32	34 @ 35
1/2 Blood	33 @ 34	31 @ 32	31 @ 32	34 @ 35
1/4 "	33 @ 34	30 @ 31	30 @ 31	34 @ 35
Fine Delaine	29 @ 30	26 @ 27	26 @ 27	30 @ 31
(UNWASHED.)				
Fine	19 @ 20	18 @ 19	18 @ 19	20 @ 21
1/2 Blood	24 @ 25	22 @ 23	22 @ 23	26 @ 27
1/4 "	25 @ 26	23 @ 24	23 @ 24	26 @ 27
1/8 "	24 @ 25	23 @ 24	23 @ 24	27 @ 28
Fine Delaine	22 @ 23	21 @ 22	21 @ 22	24 1/2 @ 25 1/2
KENTUCKY AND INDIANA.				
(UNWASHED.)				
1/2 Blood	26 @ 27	24 @ 25	24 @ 25	27 @ 28
1/4 "	26 @ 27	24 @ 25	24 @ 25	28 @ 29
Braid	23 @ 24	22 @ 23	22 @ 23	24 @ 25
MISSOURI, IOWA, AND ILLINOIS.				
(UNWASHED.)				
1/2 Blood	24 @ 25	23 @ 24	23 @ 24	27 @ 27 1/2
1/4 "	24 @ 25	23 @ 24	23 @ 24	27 @ 28
Braid	23 @ 24	22 @ 23	22 @ 23	24 @ 25
TEXAS.				
(SCOURD BASIS.)				
12 months, fine, and fine medium	54 @ 55	52 @ 54	52 @ 53	53 @ 55
6 to 8 months, fine	47 @ 48	46 @ 47	46 @ 47	48 @ 50
12 months, medium	50 @ 51	48 @ 49	47 @ 48	48 @ 50
6 to 8 months, medium	43 @ 44	41 @ 42	41 @ 42	42 @ 45
Fall, fine and fine medium	44 @ 45	43 @ 44	43 @ 44	43 @ 45
" medium	40 @ 41	38 @ 40	38 @ 40	42 @ 43
CALIFORNIA.				
(SCOURD BASIS.)				
Free, 12 months	48 @ 50	48 @ 50	48 @ 50	50 @ 51
" 6 to 8 months	44 @ 45	44 @ 45	44 @ 45	44 @ 45
Fall, free	42 @ 43	42 @ 43	42 @ 43	40 @ 41
" defective	36 @ 39	36 @ 39	36 @ 39	33 @ 36
TERRITORY WOOL: Montana, Wyoming, Utah, Idaho, Oregon, etc.				
(SCOURD BASIS.)				
Staple, fine and fine medium	55 @ 57	54 @ 56	53 @ 55	60 @ 62
1/2 medium	52 @ 53	50 @ 51	50 @ 51	56 @ 57
Clothing, fine and fine medium	51 @ 53	49 @ 51	48 @ 50	51 @ 53
" medium	47 @ 48	45 @ 46	45 @ 46	48 @ 50
NEW MEXICO. (Spring.)				
(SCOURD BASIS.)				
No. 1	49 @ 50	48 @ 49	48 @ 49	50 @ 52
No. 2	45 @ 46	43 @ 44	43 @ 44	46 @ 47
No. 3	41 @ 42	38 @ 40	38 @ 40	40 @ 41
No. 4	37 @ 38	35 @ 37	35 @ 37	37 @ 39
NEW MEXICO. (Fall.)				
(SCOURD BASIS.)				
No. 1				
No. 2				
No. 3				
No. 4				
GEORGIA AND SOUTHERN.				
Unwashed	24 @ 25	23 @ 24	22 @ 23	23 @ 24

DOMESTIC WOOL.

BOSTON, June 30, 1913.

The months of April, May and June are always considered the "off" months of the year as far as values are concerned, owing to the fact that stocks of old wool are very much depleted and the new wools have not arrived in large quantities.

To the natural uncertainty of values during this "hay and grass" period, have this year been added the unsettled influence of continued tariff agitation with the almost certain prospect of free wool and much lower duties on manufactured products. Consequently manufacturers have run down their old stock to the lowest possible point and their indifference to the general market has made for weak and steadily declining values. Under these conditions quotations are somewhat nominal and depend largely on the urgency of the needs of the buyer.

Very few contracts for future delivery are being made by manufacturers as most of them prefer to take the chances of filling their requirements when they are obliged to do so and thus far, in pursuing this "hand to mouth" policy, they have won out.

It is worthy of note that more wool is coming forward on consignment this season than for some years, although full prices are being paid in the country markets.

GEORGE W. BENEDICT.

PULLED WOOLS. (*Scoured basis.*) (W. A. BLANCHARD.)

	1913.			1912.
	April.	May.	June.	June.
Extra, and Fine A	53 @ 57	52 @ 56	50 @ 56	55 @ 62
A Super	47 @ 51	47 @ 50	46 @ 48	53 @ 55
B Super	44 @ 47	43 @ 46	42 @ 44	50 @ 53
C Super	35 @ 38	34 @ 38	33 @ 36	38 @ 43
Fine Combing	52 @ 55	50 @ 53	48 @ 52	55 @ 58
Medium Combing	48 @ 50	46 @ 49	45 @ 47	50 @ 53
Low Combing	44 @ 47	43 @ 45	40 @ 43	45 @ 48
California Extra	50 @ 54	50 @ 53	48 @ 52	54 @ 58

REMARKS.

The quotations as noted above give a fair indication of the course of the market throughout the quarter. In some instances the decline was sharper; as, for example, in June when an accumulation of Chicago A supers — about 2,500 bags — held at 46 to 48 cents was sold to come East at 42 to 43 cents. In general, fine and low wools were in better demand than intermediate grades; but all transactions were on a hand-to-mouth basis. The trend of prices is towards the free-wool level; and the prevailing belief is that many, if not most, of our domestic wools are on a parity with the world's values.

A test of the London market was made by the two leading Chicago pullers by a shipment of sample bales of their principal grades, and the prices realized were about two cents a pound less than selling prices here. This

disparity is accounted for in part by the foreign buyer's unfamiliarity with the "yield" from our standard brushed pullings. In contrast, several of the "off" grades brought higher figures than are obtained on this side.

• W. A. BLANCHARD.

FOREIGN WOOLS. (MAUGER & AVERY.)

	1913.			1912.
	April.	May.	June.	June.
Australian Combing:				
Choice	41 @ 44	41 @ 44	42 @ 45	42 @ 45
Good	39 @ 40	39 @ 40	39 @ 40	40 @ 41
Average	36 @ 38	36 @ 38	37 @ 38	36 @ 37
Australian Clothing:				
Choice	41 @ 44	41 @ 44	41 @ 44	43 @ 45
Good	40 @ 41	40 @ 42	40 @ 42	40 @ 41
Average	38 @ 39	38 @ 39	38 @ 39	38 @ 39
Sydney and Queensland:				
Good Clothing	42 @ 44	42 @ 44	42 @ 44	42 @ 44
Good Combing	40 @ 43	40 @ 43	40 @ 43	41 @ 43
Australian Crossbred:				
Choice	40 @ 43	40 @ 43	40 @ 43	40 @ 42
Average	35 @ 38	36 @ 38	36 @ 38	35 @ 37
Australian Lambs:				
Choice	42 @ 45	42 @ 44	42 @ 45	42 @ 45
Good	39 @ 40	39 @ 40	39 @ 40	39 @ 40
Good Defective	37 @ 39	37 @ 39	37 @ 39	37 @ 38
Cape of Good Hope:				
Choice	34 @ 36	34 @ 36	34 @ 36	34 @ 36
Average	30 @ 33	30 @ 33	30 @ 33	31 @ 33
Montevideo:				
Choice	36 @ 38	36 @ 38	36 @ 38	34 @ 36
Average	33 @ 35	33 @ 35	33 @ 35	32 @ 33
Crossbred, Choice	36 @ 40	36 @ 40	36 @ 40	35 @ 37
English Wools:				
Sussex Fleece	42 @ 43	42 @ 43	42 @ 43	41 @ 42
Shropshire Hogs	41 @ 42	41 @ 42	41 @ 43	40 @ 41
Yorkshire Hogs	38 @ 39	38 @ 39	39 @ 40	36 @ 38
Irish Selected Fleece	39 @ 40	39 @ 40	39 @ 41	37 @ 38
Carpet Wools:				
Scotch Highland, White	24 @ 25	24 @ 25	25 @ 26	23 @ 24
East India, 1st White Joria	32 @ 34	32 @ 34	32 @ 34	31 @ 33
East India, White Kandahar	28 @ 30	28 @ 30	29 @ 30	27 @ 29
Donskoi, Washed, White	34 @ 35	34 @ 35	34 @ 35	34 @ 36
Aleppo, White	34 @ 35	34 @ 35	34 @ 35	34 @ 36
China Ball, White	26 @ 28	26 @ 28	26 @ 28	24 @ 26
" " No. 1, Open	24 @ 27	24 @ 27	24 @ 27	23 @ 24
" " No. 2, Open	19 @ 20	19 @ 20	19 @ 20	16 @ 18

FOREIGN WOOL.

The continued discussion of the tariff bill by Congress has checked the purchases of all classes of foreign wools. Manufacturers of every description are buying domestic wool where possible, in order to avoid the payment of duties on imported stock.

Consumers of combing and clothing wool are curtailing their production because of the falling off in orders for goods, and it is not expected that the manufacturing business will improve to any extent until the details of the new tariff have been fixed and the result of American industries known and fully understood.

C. F. AVERY.

Boston, July 15, 1913.

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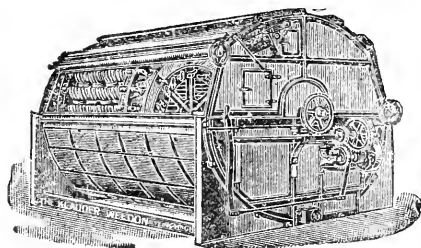
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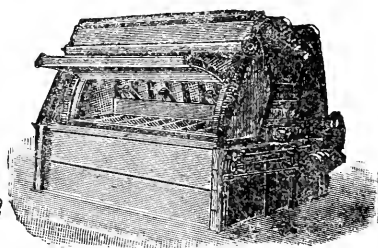
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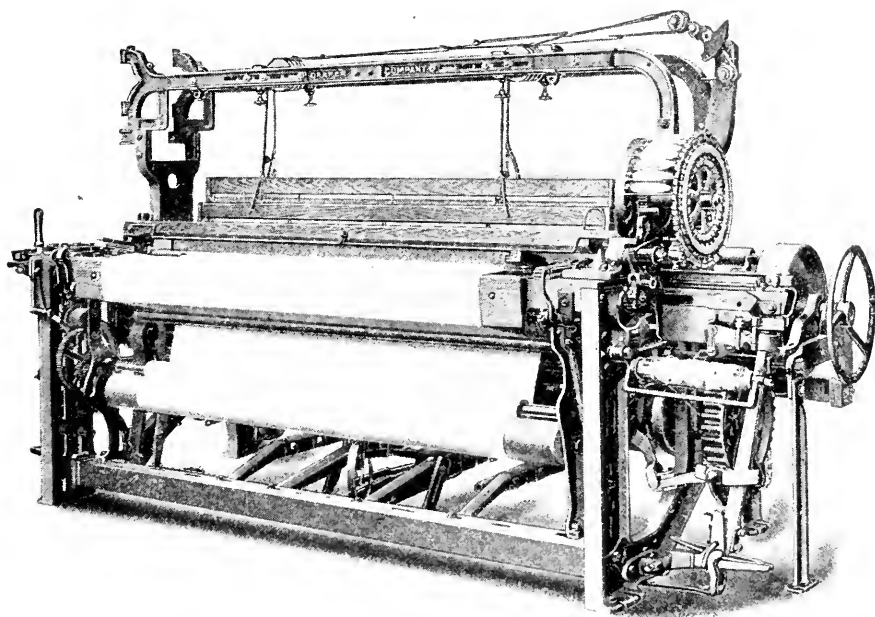
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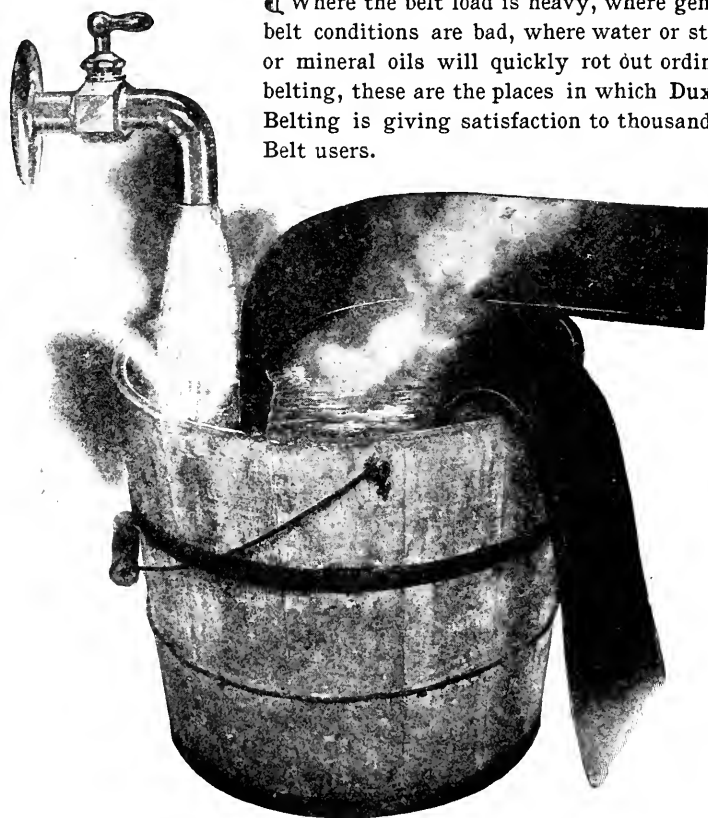
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**Schieren's Duxbak is guaranteed fully against water, moisture,
fumes of any kind and for 100% quality, not 99**

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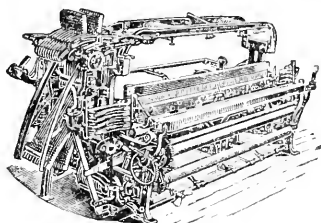
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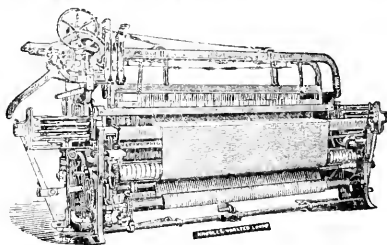
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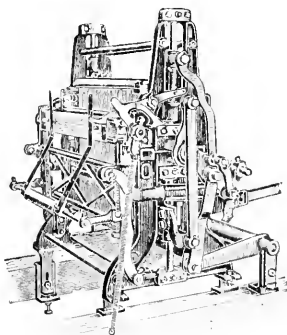
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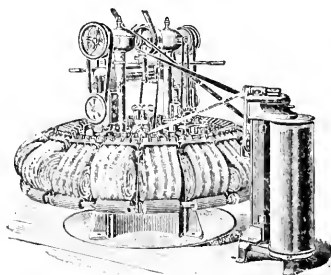
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